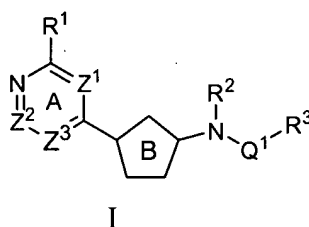


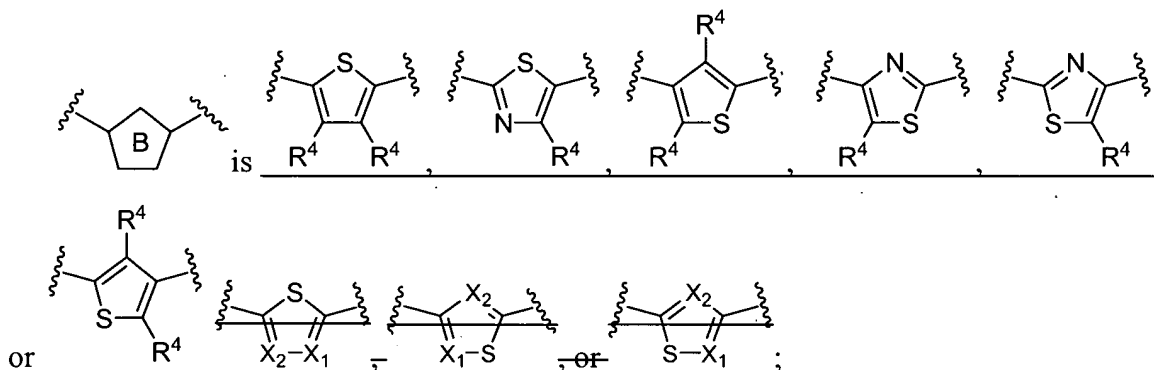
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A compound of formula I:



or a pharmaceutically acceptable salt thereof, wherein:



R^1 is halogen, CN, NO_2 , or V_mR ;

Z^1 and Z^3 are each independently CR^Z_1 [[, and]]

Z^2 is CR^1 ;

each occurrence of R^Z is independently halogen, CN, NO_2 , or $\text{U}_n\text{R}'$;

R^2 is $\text{U}_n\text{R}'$;

~~X^1 and X^2 are each independently CR^4 or N;~~

each occurrence of R^4 is independently halogen, CN, NO_2 , or V_mR ;

each occurrence of U or V is independently an optionally substituted C_{1-6} alkylidene chain, wherein up to two methylene units of the chain are optionally and independently replaced by $-\text{NR}-$, $-\text{S}-$, $-\text{O}-$, $-\text{CS}-$, $-\text{CO}_2-$, $-\text{OCO}-$, $-\text{CO}-$, $-\text{COCO}-$, $-\text{CONR}-$, $-\text{NRCO}-$, $-\text{NRCO}_2-$, $-\text{SO}_2\text{NR}-$, $-\text{NRSO}_2-$, $-\text{CONRNR}-$, $-\text{NRCONR}-$,

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

-OCONR-, -NRNR-, -NRSO₂NR-, -SO-, or -SO₂-;

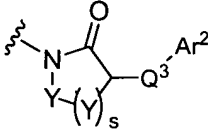
m and n are each independently 0 or 1;

each occurrence of R is independently hydrogen or an optionally substituted C₁₋₆ aliphatic group; and each occurrence of R' is independently hydrogen or an optionally substituted C₁₋₆ aliphatic group, a 3-8-membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; or R and R', two occurrences of R, or two occurrences of R', are taken together with the atom(s) to which they are bound to form an optionally substituted 3-12 membered saturated, partially unsaturated, or fully unsaturated monocyclic or bicyclic ring having 0-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

Q¹ is -CO-, ~~-SO₂-~~, or ~~-SO₂NR-~~;

R³ is Q²-Ar¹, wherein Q² is -(CHR⁶)_q-, where q is 1, 2, or 3,

or R² and Q¹-R³, taken together with the intervening nitrogen atom, form the cyclic

group: , where s is 1 or 2, each occurrence of Y is independently, as valency and stability permit, -CO-, -CS-, -SO₂-, -O-, -S-, -NR⁵-, or -C(R⁵)₂-, and R⁵ is U_nR';

~~Q² and Q³ is are each independently~~ a bond or a C₁₋₆ alkylidene chain, wherein up to two methylene units of the chain are each optionally and independently replaced by -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR'-, -NR'CO-, -NR'CO₂-, -SO₂NR'-, -NR'SO₂-, -CONR'NR'-, -NR'CONR'-, -OCONR'-, -NR'NR'-, -NR'SO₂NR'-, -SO-, or -SO₂-; and wherein any carbon atom in the one or more methylene units is optionally substituted with one or two occurrences of R⁶, wherein each

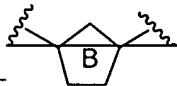
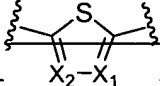
Applicants: Jingrong Cao et al.
Application No.: 10/696,862

occurrence of R^6 is independently halogen, CN, NO_2 , or U_nR' , or two occurrences of R^6 , or R' and R^6 , taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered cycloalkyl, heterocyclyl, aryl or heteroaryl ring; and

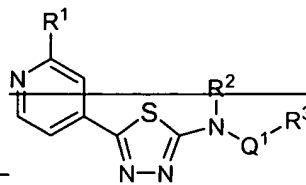
Ar^1 is a 5-8 membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from oxygen or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from oxygen or sulfur; wherein Ar^1 is optionally substituted with 0-5 independent occurrences of TR^7 ; wherein T is a bond or is a C_1 - C_6 alkylidene chain wherein up to two methylene units of T are optionally and independently replaced by $-NR-$, $-S-$, $-O-$, $-CS-$, $-CO_2-$, $-OCO-$, $-CO-$, $-COCO-$, $-CONR-$, $-NRCO-$, $-NRCO_2-$, $-SO_2NR-$, $-NRSO_2-$, $-CONRNR-$, $-NRCONR-$, $-OCONR-$, $-NRNR-$, $-NRSO_2NR-$, $-SO-$, or $-SO_2-$;

Ar^2 is a 5-8 membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein Ar^2 is optionally substituted with 0-5 independent occurrences of TR^7 ; wherein T is a bond or is a C_1 - C_6 alkylidene chain wherein up to two methylene units of T are optionally and independently replaced by $-NR-$, $-S-$, $-O-$, $-CS-$, $-CO_2-$, $-OCO-$, $-CO-$, $-COCO-$, $-CONR-$, $-NRCO-$, $-NRCO_2-$, $-SO_2NR-$, $-NRSO_2-$, $-CONRNR-$, $-NRCONR-$, $-OCONR-$, $-NRNR-$, $-NRSO_2NR-$, $-SO-$, or $-SO_2-$; and

each occurrence of R^7 is independently R' , halogen, NO_2 , or CN;
provided that:

~~1) for compounds described where~~  ~~is~~  ~~, one or more of, or all of~~
~~the following conditions apply:~~

Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



A) ~~for compounds having the structure:~~

i) ~~when R¹ is Cl, and R² is CH(CH₃)COOCH₃ or hydrogen, then Q¹-R³ is not CO(unsubstituted phenyl), CO(unsubstituted 2-furyl), or COCH₂(unsubstituted phenyl);~~

ii) ~~when R¹ is hydrogen, R² is hydrogen, and Q¹ is CO, then R³ is not:~~

a) ~~phenyl substituted with 4-O(CH₂)₄-CH₃ or 4-(CH₂)₄-CH₃;~~

b) ~~phenyl substituted with 2-Cl, 4-NO₂, 4-Cl, 2-Br, 3-Br, 3-I, 3-CH₃, 4-OCH₃, 3-NO₂, or 4-I;~~

c) ~~2,6-OCH₃-phenyl;~~

d) ~~(5-Cl, 3-CH₃, 1-phenyl)-pyrazol-4-yl; or~~

e) ~~4-OnBu-phenyl, CH₂O(2-F-phenyl), (CH₂)₂phenyl, furan-2-yl, thiophen-2-yl, 4-CH₃-phenyl, CH₂O(2-CH₃-phenyl), 3-OCH₃-phenyl, 2-(2,5-dimethoxyphenyl)quinolin-4-yl, NH-(4-Cl-phenyl), NH-(3,4-dichlorophenyl), (2-CO₂H, 3-NO₂)-phenyl, 3,5-dimethyl-1,2,4-oxazol-4-yl, CH=CH-phenyl, 4-F-phenyl, C(CH₃)₂O-(4-Cl-phenyl), NH(3-Cl-phenyl), NHphenyl, unsubstituted phenyl, 3,4,5-OCH₃-phenyl, 4-NO₂-phenyl, 4-cyclopentoxyp-phenyl, (CH₂)₃phenyl, (tricyclo[3.3.1.1.3,7]decan-1-yl, CH₂O-(3-CH₃-phenyl), 3-NO₂-phenyl, cyclopropyl-(4-tert-butyl-phenyl), 2,3-OCH₃-phenyl, 1,3-benzodioxo-5-yl, CH₂O-(4-F-phenyl), or 3-Br-phenyl;~~

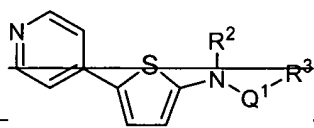
iii) ~~when R¹ is hydrogen, R² is hydrogen, and Q¹ is CSNH, then R³ is not 2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl;~~

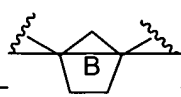
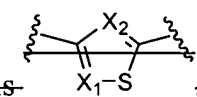
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862

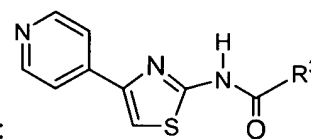
iv) when R^1 is hydrogen, R^2 is hydrogen, and Q^1 is SO_2 , then R^3 is not unsubstituted phenyl, unsubstituted benzyl, unsubstituted naphthyl, phenyl substituted with para $NHCOCH_3$, para NH_2 , or para CH_3 ; and

v) when R^1 is hydrogen, R^2 is $CH_2CH=CH_2$, and Q^1 is CO , then R^3 is not 4- OCH_3 -phenyl, unsubstituted naphthyl, NH (4- OCH_3 -phenyl), 3,5- OCH_3 -phenyl, CH_2O phenyl, CH_2 -thiophen-2-yl, or CH (phenyl)(CH_2CH_3); and

vi) when R^1 is hydrogen, R^2 is CH_2CH_3 , and Q^1 is CO , then R^3 is not 2,4- Cl -phenyl; and

B) for compounds having the structure: , when R^2 is hydrogen or CH_3 , and Q^1 is CO , then R^3 is not $OCH_2CH_2OCH_2$ phenyl;

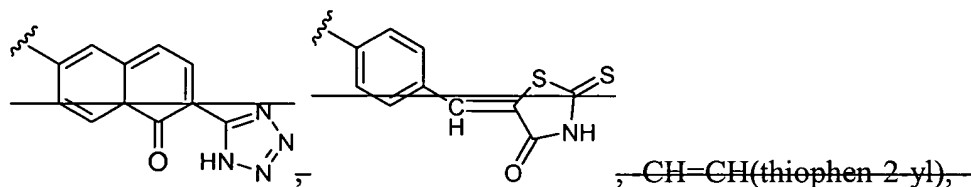
II) for compounds described where  is , one or more of, or all of the following conditions apply:

A) for compounds having the structure: ,

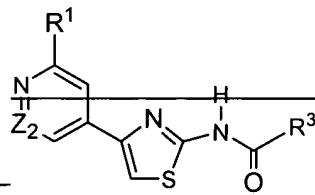
i) when R^3 is Q^2-Ar^1 , and Q^2 is a bond then Ar^1 is not any one or more of the following: unsubstituted phenyl or phenyl substituted with 2- Br ; 2- Cl ; 2- I ; 2,6- F ; 3,5- OCH_3 ; 3,4,5- OCH_3 ; 2,4- OCH_3 ; 3,4- CH_3 ; 2,5- Cl ; 3,4- OCH_3 ; 2- Cl , 5- NO_2 ; 3,5- Cl ; 3- $O(CH_2)_4CH_3$; 3- O -n-butyl; 3- CF_3 ; 3- OCH_3 ; 3- Br ; 3- NO_2 ; 3- CH_3 ; 3- O -phenyl; 3- Cl ; 4- $N(CH_3)_2$; 4- $N(CH_2CH_3)_2$; 4- $SO_2N(R^2)_2$; 4- CN ; 4- $COOCH_3$; 4- $C(O)$ phenyl; 4-phenyl; 4-tert-butyl; 4- O -phenyl; 4- O -isopropyl; 4- OCH_3 ; 4- OCH_2CH_3 ; 4- O -n-butyl; 4- Cl ; 4- Br ; 4- F ; 4- CH_3 ; 4- NO_2 ; 4- Cl ; 3- NO_2 ; 4-morpholino; 3- NO_2 , 2,5-dioxopyrrolidinyl, or 4-piperidinyl; and

Applicants: Jingrong Cao et al.
 Application No.: 10/696,862

iii) R^3 is not any one ~~or more~~ of the following groups:



~~CH=CH-unsubstituted phenyl, -CH₂(3-NHCOPh-phenyl), -6-bromo-2-(4-ethylphenyl)-4-quinoliny, -CH₂-pyrrolidine, unsubstituted cyclohexyl, unsubstituted benzyl, unsubstituted furan-2-yl, -CH=CH(3-NO₂-phenyl), -CH=CH(4-NO₂-phenyl), -CH₂-naphthyl, unsubstituted naphthyl, unsubstituted thiophene, unsubstituted cyclopropyl, 1,4-benzodioxin, 2-oxo-1-benzopyran, 4-oxo-1-benzopyran, 2-thienyl-quinolin-4-yl, 3-chloro-benzo[b]thiophen-2-yl, 5-Br-(thiophen-2-yl), 5-Cl-(thiophen-2-yl), 5-NO₂-(thiophen-2-yl), 5-NO₂-(furan-2-yl), 2,5-Cl-(thiophen-3-yl), -CH=CH(5-NO₂-thiophen-2-yl), 5-NO₂-(benzothiophen-2-yl), 3-OCH₃-(naphth-2-yl), -CH₂O(2,4-Cl-phenyl), (CH₂)₂S-phenyl, 2-phenyl-quinolin-4-yl, -CH₂O(4-Cl-phenyl), -CH₂CH₂-3-(4-Cl-phenyl)-1-phenyl-1-H-pyrazol-4-yl, or -CH₂(1,3-dioxoisindole) [; and]]~~



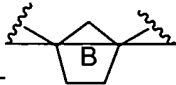
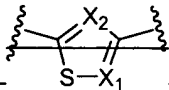
B) ~~for compounds having the structure:~~

i) ~~when R^1 is Cl, and X_1 is C-Cl, then R^3 is not NHSO₂-(2-CF₃-phenyl) or -NHSO₂-(2,6-dimethoxy-phenyl);~~

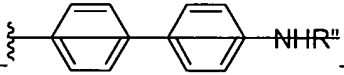
ii) ~~when R^1 is CH₃, and X_1 is C-CH₃, then R^3 is not an optionally substituted indole or optionally substituted dihydroindole; and~~

C) ~~for compounds of general formula I, when Z_1 , Z_2 and Z_3 are each CH, R^1 is H, X^1 is CH and X_2 is C-COOCH₃, then R^3 is not 2-(4-ethyl-phenyl)-6-bromo-quinolin-4-yl; and~~

Applicants: Jingrong Cao et al.
 Application No.: 10/696,862

III. ~~for compounds described above where~~  ~~is~~  ~~, one or more of, or all of the following conditions apply:~~

~~A) when Z^1 , Z^2 and Z^3 are each CH, X^2 is N, X^1 is CH, Q^1 is CONR, and R^2 is hydrogen or CH₃, then R^3 is not optionally substituted pyridyl, optionally substituted thiazol-4-yl, CH₂pyridyl, benzimidazol-4-yl, quinolin-2-yl, 1-bromo-isoquinolin-3-yl, benzthiazol-2-yl, optionally substituted 5,6,7,8-tetrahydro-naphthyridin-2-yl, or phenyl substituted with CH₂piperidinyl; and~~

~~B) when Z^1 , Z^2 and Z^3 are each CH, X^2 is N, X^1 is CH, Q^1 is SO₂, and R^2 is hydrogen, then R^3 is not phenyl substituted with~~  ~~where R'' is hydrogen or COCH₃;~~

~~C) when Z^1 , Z^2 and Z^3 are each CH, X_1 is C-CO₂H, X^2 is CH, R^2 is hydrogen, and Q^1 is SO₂, then R^3 is not 2-CH₃-phenyl; and~~

~~D) when Z^1 , Z^2 and Z^3 are each CH, X_1 is CH, X^2 is N, R^2 is hydrogen, and Q^1 is CO, then R^3 is not 5-methoxy-6-trifluoromethyl-1H-indole.~~

2-3. (Canceled)

4. (Currently amended) The compound of claim 1 [[3]], wherein R^2 is hydrogen, or is U_nR' , where n is 1, and U is a C₁₋₆ alkylidene chain wherein one or two methylene units are optionally and independently replaced by O, NR, S, or C(O).

5. (Currently amended) The compound of claim 1 [[3]], wherein U is -CH₂-, -CH₂CH₂-, -CH₂CH₂CH₂-, -CH₂CH₂CH₂CH₂-, -CH₂O-, -CH₂S-, -CH₂NR-, -CH₂CH₂O-, -CH₂CH₂S-, -CH₂CH₂NR-, -CH₂CH₂CH₂O-, -CH₂CH₂CH₂S-, -CH₂CH₂CH₂NR-, -CH₂CH₂CH₂CH₂O-, -CH₂CH₂CH₂CH₂S-, -CH₂CH₂CH₂CH₂NR-, -CH₂CH₂OCH₂CH₂-, -(CH₂)₄NHCH₂-, -(CH₂)₃NHCH₂CH₂-, or -CH₂CH₂NHCH₂CH₂-, and preferred R' groups

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

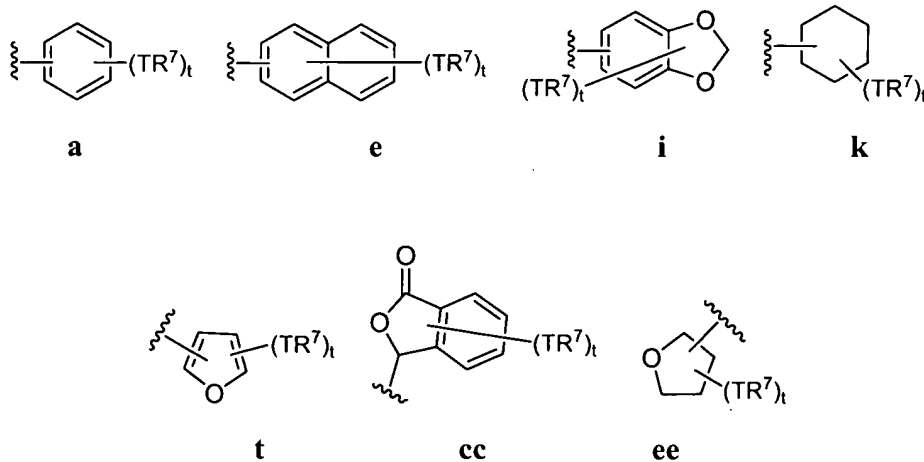
are hydrogen, C₁-C₄alkyl, optionally substituted tetrahydropyranyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, pyridinyl, phenyl, or cyclohexyl, or R and R', taken together with the nitrogen atom to which they are bound, form an optionally substituted 5- or 6-membered heterocyclcyl ring.

6. (Currently amended) The compound of claim 1 [[3]], wherein Q¹ is -C(O)- or -SO₂NR-.

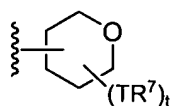
7. (Canceled)

8. (Currently amended) The compound of claim 1 [[7]], wherein R⁶ is CH₂OH, CH₂CH₂OH, OH, OMe, OEt, NH₂, NH(Me), NH(Et), N(Me)(Me), CH₂NH₂, CH₂CH₂NH₂, NHCO₂*t*-butyl, phenyl, cyclopentyl, methyl, ethyl, isopropyl, cyclopropyl, NH(CH₂)₃NH₂, NH(CH₂)₂NH₂, NH(CH₂)₂NHEt, NHCH₂pyridyl, NHSO₂phenyl, NHC(O)CH₂C(O)O*t*-butyl, NHC(O)CH₂NH₃, and NHCH₂-imidazol-4-yl.

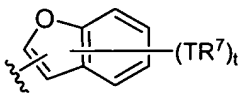
9. (Previously presented) The compound of claim 3, wherein Ar¹ is:



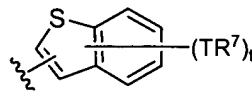
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



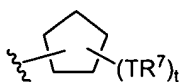
ii



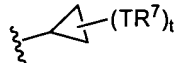
jj



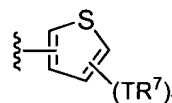
kk



mm



oo



pp

wherein t is 0, 1, 2, 3, 4 or 5, and wherein any Ar^1 is bonded to Q^2 through any substitutable carbon atom, and wherein one or more hydrogen atoms on any substitutable carbon atom is substituted with one or more independent occurrences of TR^7 .

10. (Previously presented) The compound of claim 9, wherein Ar^1 is **a**, **e**, **i**, **k**, **cc**, **jj**, or **pp**.

11. (Original) The compound of claim 9, wherein T is a bond or is an optionally substituted C_{1-6} alkylidene chain wherein one or two methylene units are optionally and independently replaced by $-\text{O}-$, $-\text{NR}-$, $-\text{S}-$, $-\text{SO}_2-$, $-\text{COO}-$, $-\text{CO}-$, $-\text{OSO}_2-$, $-\text{NRSO}_2-$, $-\text{CONR}-$, or $-\text{SO}_2\text{NR}-$, and R^7 is R' or halogen.

12. (Original) The compound of claim 9, wherein each occurrence of TR^7 is independently $-\text{C}_{1-3}\text{alkyl}$, $-\text{OR}'$, $-\text{SR}'$, $-\text{CF}_3$, $-\text{OCF}_3$, $-\text{SCF}_3$, $-\text{F}$, $-\text{Cl}$, I , $-\text{Br}$, $-\text{COOR}'$, $-\text{COR}'$, $-\text{O}(\text{CH}_2)_4\text{N}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_3\text{N}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_2\text{N}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)\text{N}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_4\text{CON}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_3\text{CON}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)_2\text{CON}(\text{R})(\text{R}')$, $-\text{O}(\text{CH}_2)\text{CON}(\text{R})(\text{R}')$, $-\text{C}(\text{O})\text{N}(\text{R})(\text{R}')$, $-(\text{CH}_2)_4\text{OR}'$, $-(\text{CH}_2)_3\text{OR}'$, $-(\text{CH}_2)_2\text{OR}'$, $-\text{CH}_2\text{OR}'$, optionally substituted phenyl or benzyl, $-\text{N}(\text{R})(\text{R}')$, $-(\text{CH}_2)_4\text{N}(\text{R})(\text{R}')$,

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

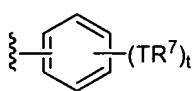
$-(\text{CH}_2)_3\text{N}(\text{R})(\text{R}')$, $-(\text{CH}_2)_2\text{N}(\text{R})(\text{R}')$, $-(\text{CH}_2)\text{N}(\text{R})(\text{R}')$, or $\text{SO}_2\text{N}(\text{R})(\text{R}')$, $\text{NRSO}_2\text{R}'$, $\text{CON}(\text{R})(\text{R}')$, or $-\text{OSO}_2\text{R}'$.

13. (Canceled)

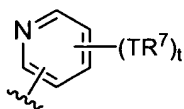
14. (Currently amended) The compound of claim 1 [[13]], wherein Q^3 is a direct bond, or is $-(\text{CHR}^6)_q-$, $-(\text{CHR}^6)_q\text{O}-$, $-(\text{CHR}^6)_q\text{S}-$, $-(\text{CHR}^6)_q\text{S}(\text{O})_2-$, $-(\text{CHR}^6)_q\text{S}(\text{O})-$, $-(\text{CHR}^6)_q\text{NR}-$, or $-(\text{CHR}^6)_q\text{C}(\text{O})-$, wherein q is 0, 1, 2, or 3, and R^6 is R' , $-\text{N}(\text{R})(\text{R}')$, $-(\text{CH}_2)_{1-4}\text{N}(\text{R})(\text{R}')$, $-\text{OR}'$, $-(\text{CH}_2)_{1-4}\text{OR}'$, $-\text{NR}(\text{CH}_2)_{1-4}\text{N}(\text{R})(\text{R}')$, $-\text{NR}(\text{CH}_2)_{1-4}\text{SO}_2\text{R}'$, $-\text{NR}(\text{CH}_2)_{1-4}\text{COOR}'$, or $-\text{NR}(\text{CH}_2)_{1-4}\text{COR}'$, or two occurrences of R^6 , taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered saturated, partially unsaturated, or fully unsaturated ring.

15. (Original) The compound of claim 14, wherein R^6 is CH_2OH , $\text{CH}_2\text{CH}_2\text{OH}$, OH , OMe , OEt , NH_2 , $\text{NH}(\text{Me})$, $\text{NH}(\text{Et})$, $\text{N}(\text{Me})(\text{Me})$, CH_2NH_2 , $\text{CH}_2\text{CH}_2\text{NH}_2$, $\text{NHCO}_2t\text{-butyl}$, phenyl, cyclopentyl, methyl, ethyl, isopropyl, cyclopropyl, $\text{NH}(\text{CH}_2)_3\text{NH}_2$, $\text{NH}(\text{CH}_2)_2\text{NH}_2$, $\text{NH}(\text{CH}_2)_2\text{NHEt}$, $\text{NHCH}_2\text{pyridyl}$, $\text{NHSO}_2\text{phenyl}$, $\text{NHC}(\text{O})\text{CH}_2\text{C}(\text{O})\text{O}t\text{-butyl}$, $\text{NHC}(\text{O})\text{CH}_2\text{NH}_3$, and $\text{NHCH}_2\text{-imidazol-4-yl}$.

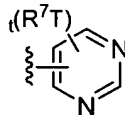
16. (Currently amended) The compound of claim 1 [[13]], wherein Ar^2 is:



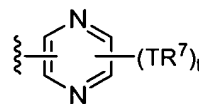
a



b

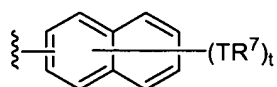


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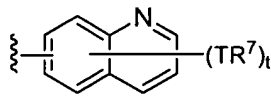


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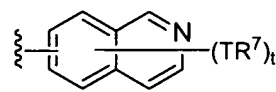
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



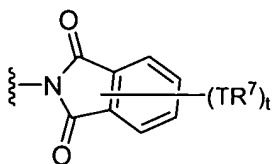
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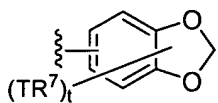
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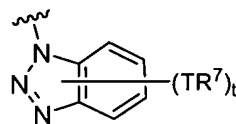
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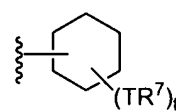
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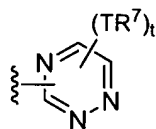
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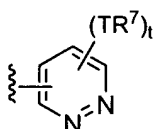
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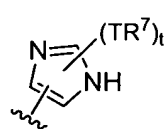
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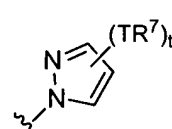
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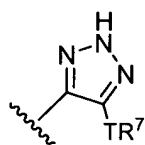
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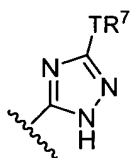
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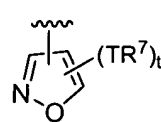
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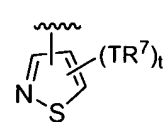
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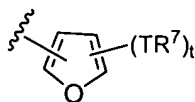
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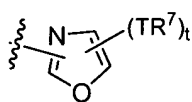
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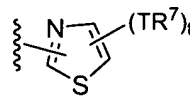
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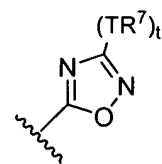
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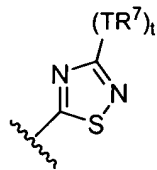


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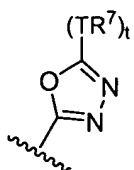


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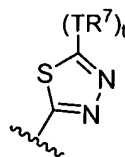
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



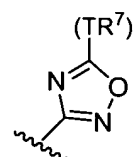
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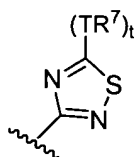
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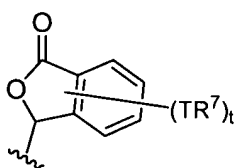
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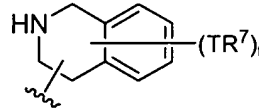
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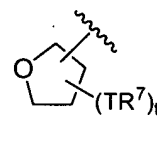
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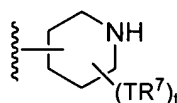
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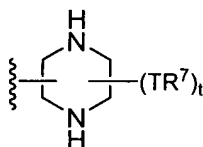
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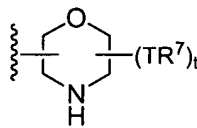
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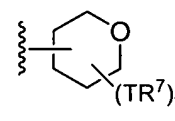
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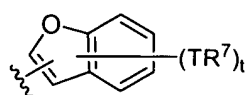
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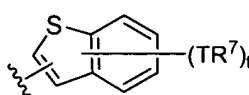
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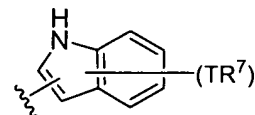
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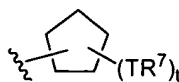
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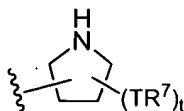
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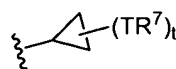
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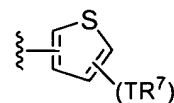
mm



nn



oo



pp

wherein t is 0, 1, 2, 3, 4 or 5, and wherein any Ar^2 is bonded to Q^3 through any substitutable nitrogen or carbon atom, and wherein one or more hydrogen atoms on any

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

substitutable nitrogen or carbon atom is substituted with one or more independent occurrences of TR⁷.

17. (Original) The compound of claim 16, wherein Ar² is **a, b, e, g, h, i, j, k, n, r, cc, dd, ff, jj, ll, or pp**.

18. (Original) The compound of claim 16, wherein T is a bond or is an optionally substituted C₁₋₆ alkylidene chain wherein one or two methylene units are optionally and independently replaced by -O-, -NR-, -S-, -SO₂-, -COO-, -CO-, -OSO₂-, -NRSO₂-, -CONR-, or -SO₂NR-, and R⁷ is R' or halogen.

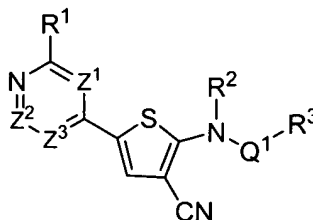
19. (Original) The compound of claim 16, wherein each occurrence of TR⁷ is independently -C₁₋₃alkyl, -OR', -SR', -CF₃, -OCF₃, -SCF₃, -F, -Cl, I, -Br, -COOR', -COR', -O(CH₂)₄N(R)(R'), -O(CH₂)₃N(R)(R'), -O(CH₂)₂N(R)(R'), -O(CH₂)N(R)(R'), -O(CH₂)₄CON(R)(R'), -O(CH₂)₃CON(R)(R'), -O(CH₂)₂CON(R)(R'), -O(CH₂)CON(R)(R'), -C(O)N(R)(R'), -(CH₂)₄OR', -(CH₂)₃OR', -(CH₂)₂OR', -CH₂OR', optionally substituted phenyl or benzyl, -N(R)(R'), -(CH₂)₄N(R)(R'), -(CH₂)₃N(R)(R'), -(CH₂)₂N(R)(R'), -(CH₂)N(R)(R'), or SO₂N(R)(R'), NRSO₂R', CON(R)(R'), or -OSO₂R'.

20. (Currently amended) The compound of claim 1 [[13]], wherein R⁵ is hydrogen, (CH₂)₃OR', (CH₂)₂OR', (CH₂)OR', (CH₂)₃N(R')₂, (CH₂)₂N(R')₂, (CH₂)N(R')₂, or C₁₋₄aliphatic.

21-22. (Canceled)

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

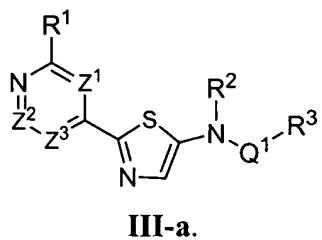
23. (Original) The compound of claim 1, wherein each occurrence of R^1 is independently hydrogen, halogen, optionally substituted C_1 - C_4 aliphatic, OR, SR, or $N(R)_2$.
24. (Previously presented) The compound of claim 23, wherein each occurrence of R^1 is independently hydrogen, halogen, $-CH_3$, $-CH_2CH_3$, $-OH$, $-OCH_3$, $-SCH_3$, $-NH_2$, $-N(CH_3)_2$, $-N(CH_2CH_3)_2$, $-NH(CH_2)_2NHCH_3$, $-NH(\text{cyclopropyl})$, $-NH(CH_2)\text{cyclopropyl}$, or $-NH(CH_2)_2N(CH_3)_2$.
25. (Original) The compound of claim 1, wherein each occurrence of R^Z is independently hydrogen, halogen, C_1 - C_4 aliphatic, OH, OR', or $N(R)(R')$.
26. (Original) The compound of claim 25, wherein each occurrence of R^Z is independently hydrogen, halogen, Me, OH, OMe, NH_2 , or $N(Me)_2$.
27. (Original) The compound of claim 1, wherein R^4 groups are each independently hydrogen, C_{1-6} aliphatic, CN, COR, $C(=O)OR$, $C(=O)N(R)_2$, or halogen.
28. (Previously presented) The compound of claim 1, wherein one occurrence of R^4 is CN and compounds have the general structure **II-a**:



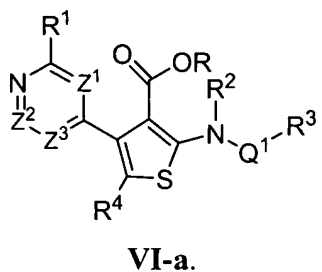
II-a.

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

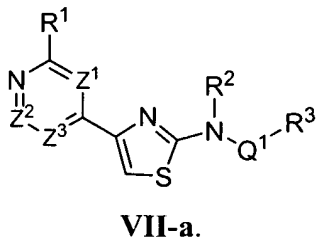
29. (Previously presented) The compound of claim 1, wherein R^4 is hydrogen and compounds have the general structure **III-a**:



30. (Previously presented) The compound of claim 1, wherein one occurrence of R^4 is hydrogen and the other occurrence of R^4 is -COOR and compounds have the general structure **VI-a**:

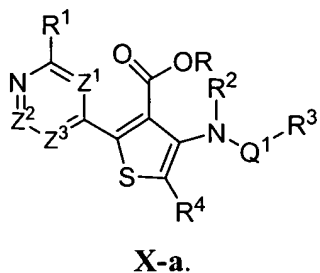


31. (Previously presented) The compound of claim 1, wherein R^4 is hydrogen and compounds have the general structure **VII-a**:

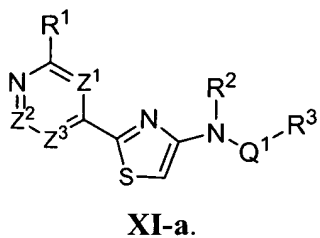


Applicants: Jingrong Cao et al.
 Application No.: 10/696,862

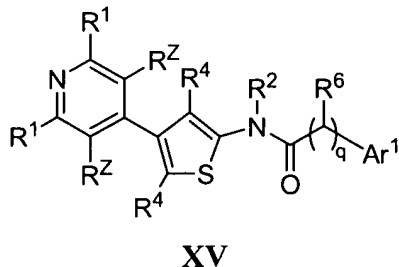
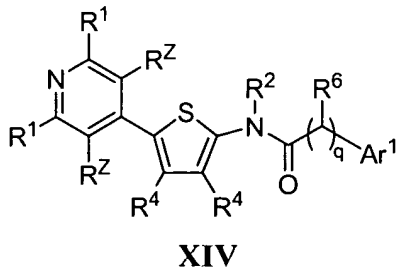
32. (Previously presented) The compound of claim 1, wherein one occurrence of R^4 is hydrogen and the other occurrence of R^4 is $C(=O)OR$ and compounds have the general structure **X-a**:



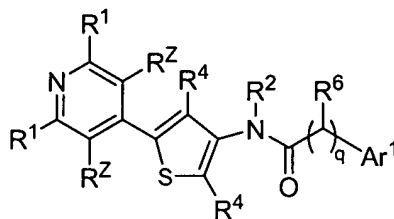
33. (Previously presented) The compound of claim 1, wherein R^4 is hydrogen and compounds have the general structure **XI-a**:



34. (Previously presented) The compound of claim 9, wherein Q^1 is $-CO-$, Q^2 is CHR^6 , q is 1, 2, or 3, and compounds have one of formulas **XIV**, **XV**, or **XVI**:

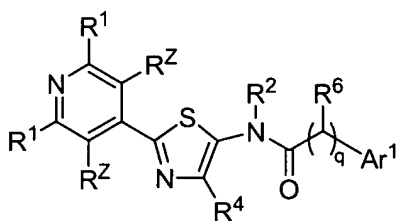


Applicants: Jingrong Cao et al.
 Application No.: 10/696,862

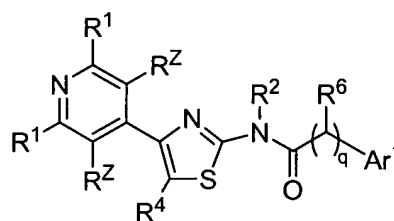


XVI.

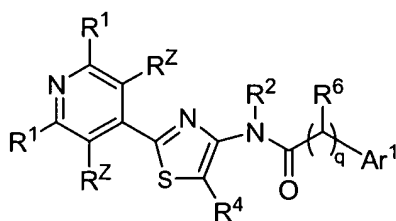
35. (Previously presented) The compound of claim 9, wherein Q¹ is -CO-, Q² is CHR⁶, q is 1, 2 or 3, and compounds have one of formulas **XVII**, **XVIII**, or **XIX**:



XVII



XVIII



XIX.

36. (Previously presented) The compound of claims 34 or 35, wherein compound variables are selected from one of more of the following groups:

- a) each occurrence of R¹ is independently hydrogen, halogen, optionally substituted C₁-C₄aliphatic, OR, SR, or N(R)₂;
- b) each occurrence of R¹ is independently hydrogen, halogen, -CH₃, -CH₂CH₃, -OH, -OCH₃, -SCH₃, -NH₂, -N(CH₃)₂, -N(CH₂CH₃)₂, -NH(CH₂)₂NHCH₃, -NH(cyclopropyl), -NH(CH₂)cyclopropyl, or -NH(CH₂)₂N(CH₃)₂;

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

c) each occurrence of R^Z is independently hydrogen, halogen, optionally substituted C_1 - C_4 aliphatic, OH, O(R'), or N(R)(R');

d) each occurrence of R^Z is independently hydrogen, halogen, Me, OH, OMe, NH_2 , or N(Me) $_2$;

e) R^2 is hydrogen, or is U_nR' , where n is 1, and U is $-CH_2-$, $-CH_2CH_2-$, $-CH_2CH_2CH_2-$, $-CH_2CH_2CH_2CH_2-$, $-CH_2O-$, $-CH_2S-$, $-CH_2NR-$, $-CH_2CH_2O-$, $-CH_2CH_2S-$, $-CH_2CH_2NR-$, $-CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2NR-$, $-CH_2CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2CH_2NR-$, $-CH_2CH_2OCH_2CH_2-$, $-(CH_2)_4NHCH_2-$, $-(CH_2)_3NHCH_2CH_2-$, or $-CH_2CH_2NHCH_2CH_2-$, and R' groups are hydrogen, C_1 - C_4 alkyl, optionally substituted tetrahydropyranyl, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, pyridinyl, phenyl, or cyclohexyl, or R and R' , taken together with the nitrogen atom to which they are bound, form an optionally substituted 5- or 6-membered heterocyclyl ring;

f) each occurrence of R^4 is independently hydrogen, C_1 - C_6 aliphatic, CN, COR, COOR, CON(R) $_2$, or halogen;

g) q is 1, 2, or 3;

h) R^6 is R' , $-N(R)(R')$, $-(CH_2)_{1-4}N(R)(R')$, $-OR'$, $-(CH_2)_{1-4}OR'$, $-NR(CH_2)_{1-4}N(R)(R')$, $-NR(CH_2)_{1-4}SO_2R'$, $-NR(CH_2)_{1-4}COOR'$, or $-NR(CH_2)_{1-4}COR'$, or two occurrences of R^6 , taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered saturated, partially unsaturated, or fully unsaturated ring;

i) R^6 is CH_2OH , CH_2CH_2OH , OH, OMe, OEt, NH_2 , NH(Me), NH(Et), N(Me)(Me), CH_2NH_2 , $CH_2CH_2NH_2$, $NHCO_2t$ -butyl, phenyl, cyclopentyl, methyl, ethyl, isopropyl, cyclopropyl, $NH(CH_2)_3NH_2$, $NH(CH_2)_2NH_2$, $NH(CH_2)_2NH$ Et, $NHCH_2$ pyridyl, $NHSO_2$ phenyl, $NHC(O)CH_2C(O)Ot$ -butyl, $NHC(O)CH_2NH_3$, and $NHCH_2$ -imidazol-4-yl;

j) Ar^1 is ring **a**, **e**, **i**, **k**, **cc**, **jj**, or **pp** wherein t is 0, 1, 2, or 3, and T is a bond or is an optionally substituted C_{1-6} alkylidene chain wherein one or two methylene units are

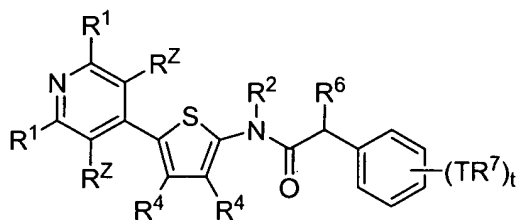
Applicants: Jingrong Cao et al.
Application No.: 10/696,862

optionally and independently replaced by -O-, -NR-, -S-, -SO₂-, -COO-, -CO-, -OSO₂-, -NRSO₂-, -CONR-, or

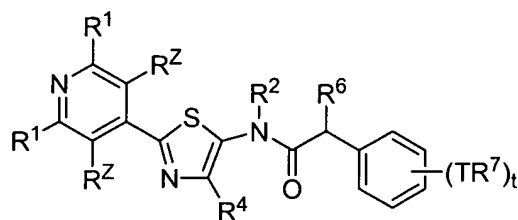
-SO₂NR-, and R⁷ is R' or halogen; or

k) Ar¹ is ring **a**, **e**, **i**, **k**, **cc**, **jj**, or **pp** wherein t is 0, 1, 2, or 3, and each occurrence of TR⁷ is independently -C₁₋₃alkyl, -OR', -SR', -CF₃, -OCF₃, -SCF₃, -F, -Cl, I, -Br, -COOR', -COR', -O(CH₂)₄N(R)(R'), -O(CH₂)₃N(R)(R'), -O(CH₂)₂N(R)(R'), -O(CH₂)N(R)(R'), -O(CH₂)₄CON(R)(R'), -O(CH₂)₃CON(R)(R'), -O(CH₂)₂CON(R)(R'), -O(CH₂)CON(R)(R'), -C(O)N(R)(R'), -(CH₂)₄OR', -(CH₂)₃OR', -(CH₂)₂OR', -CH₂OR', optionally substituted phenyl or benzyl, -N(R)(R'), -(CH₂)₄N(R)(R'), -(CH₂)₃N(R)(R'), -(CH₂)₂N(R)(R'), -(CH₂)N(R)(R'), -SO₂N(R)(R'), -NRSO₂R', -CON(R)(R'), or -OSO₂R'.

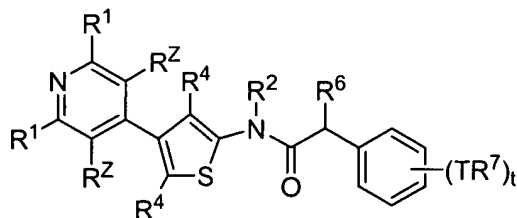
37. (Previously presented) The compound of claim 34 or 35, q is 1, and Ar¹ is optionally substituted phenyl and compounds of general formula **XIV-A** through **XIX-A** are provided:



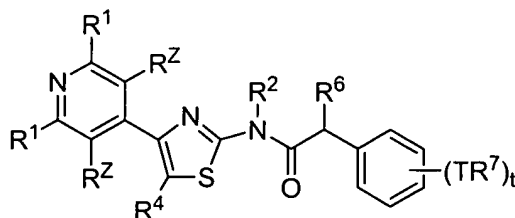
XIV-A



XV-A

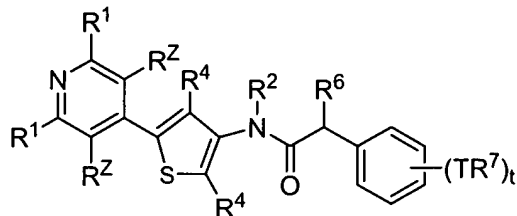


XVI-A

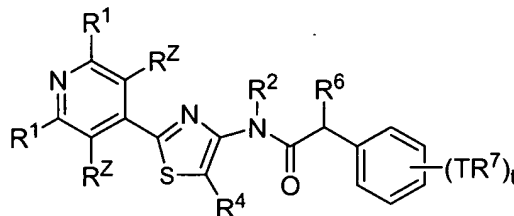


XVII-A

Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



XVIII-A



XIX-A

wherein:

each occurrence of R^1 is hydrogen;

each occurrence of R^2 is hydrogen;

R^2 is hydrogen, or is U_nR' , where n is 1, and U is $-CH_2-$, $-CH_2CH_2-$,

$-CH_2CH_2CH_2-$, $-CH_2CH_2CH_2CH_2-$, $-CH_2O-$, $-CH_2S-$, $-CH_2NR-$, $-CH_2CH_2O-$, $-CH_2CH_2S-$,
 $-CH_2CH_2NR-$, $-CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2NR-$,

$-CH_2CH_2CH_2CH_2O-$, $-CH_2CH_2CH_2CH_2S-$, $-CH_2CH_2CH_2CH_2NR-$, $-CH_2CH_2OCH_2CH_2-$,

$-(CH_2)_4NHCH_2-$, $-(CH_2)_3NHCH_2CH_2-$, or $-CH_2CH_2NHCH_2CH_2-$, and R' groups are

hydrogen, C_1 - C_4 alkyl, optionally substituted tetrahydropyranyl, pyrrolidinyl, piperidinyl,
 piperazinyl, morpholinyl, thiomorpholinyl, pyridinyl, phenyl, or cyclohexyl, or R and R' ,

taken together with the nitrogen atom to which they are bound, form an optionally
 substituted 5- or 6-membered heterocyclyl ring;

each occurrence of R^4 is independently hydrogen, C_{1-6} aliphatic, CN, COR,
 COOR, $CON(R)_2$, or halogen;

R^6 is R' , $-N(R)(R')$, $-(CH_2)_{1-4}N(R)(R')$, $-OR'$, $-(CH_2)_{1-4}OR'$,

$-NR(CH_2)_{1-4}N(R)(R')$, $-NR(CH_2)_{1-4}SO_2R'$, $-NR(CH_2)_{1-4}COOR'$, or

$-NR(CH_2)_{1-4}COR'$; and

t is 0, 1, 2, or 3, and each occurrence of TR^7 is independently $-C_{1-3}$ alkyl, $-OR'$, $-$

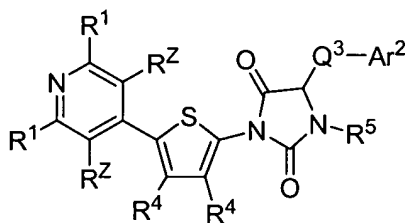
SR' , $-CF_3$, $-OCF_3$, $-SCF_3$, $-F$, $-Cl$, I , $-Br$, $-COOR'$, $-COR'$, $-O(CH_2)_4N(R)(R')$,

$-O(CH_2)_3N(R)(R')$, $-O(CH_2)_2N(R)(R')$, $-O(CH_2)N(R)(R')$, $-O(CH_2)_4CON(R)(R')$,

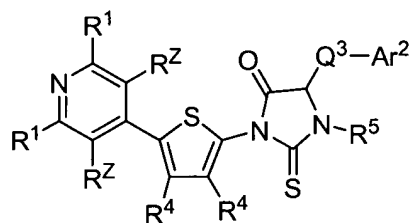
Applicants: Jingrong Cao et al.
Application No.: 10/696,862

-O(CH₂)₃CON(R)(R'), -O(CH₂)₂CON(R)(R'), -O(CH₂)CON(R)(R'), -C(O)N(R)(R'),
-(CH₂)₄OR', -(CH₂)₃OR', -(CH₂)₂OR', -CH₂OR', optionally substituted phenyl or benzyl,
-N(R)(R'), -(CH₂)₄N(R)(R'), -(CH₂)₃N(R)(R'), -(CH₂)₂N(R)(R'),
-(CH₂)N(R)(R'), -SO₂N(R)(R'), -NRSO₂R', -CON(R)(R'), or -OSO₂R'.

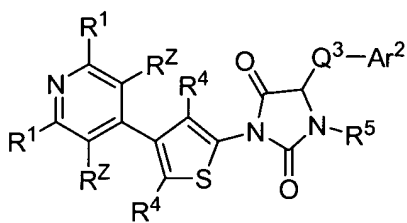
38. (Previously presented) The compound of claim 16, wherein R² and Q¹-R³, taken together with the atoms to which they are bound form a 5-membered cyclic group, and compounds have the general formula XX through XXV:



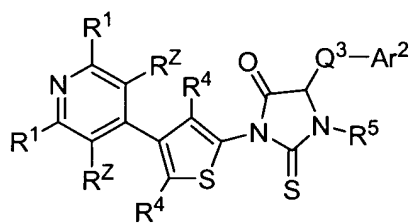
XX



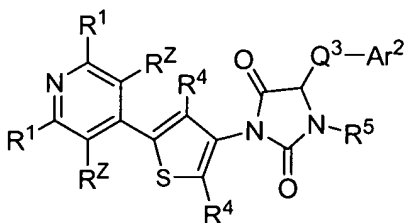
XXI



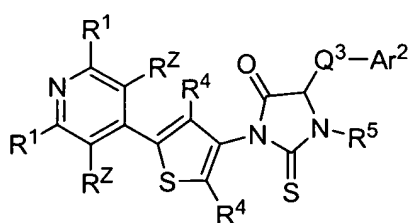
XXII



XXIII



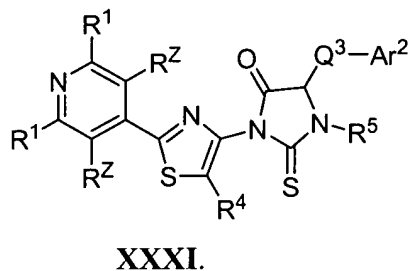
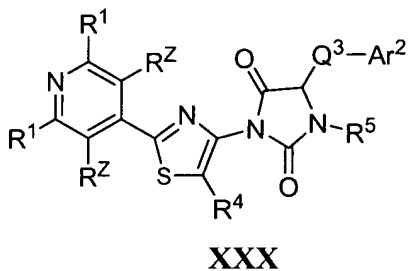
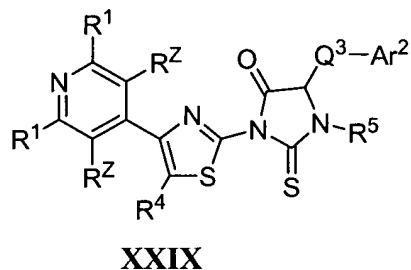
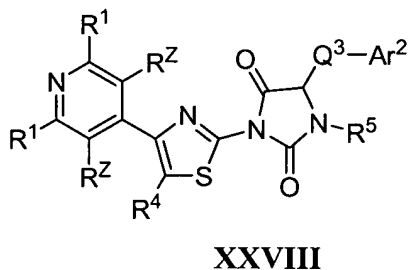
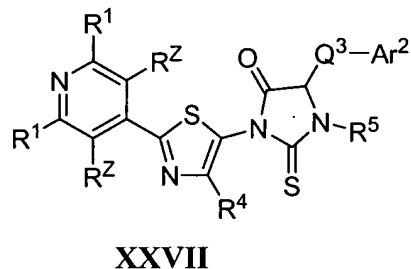
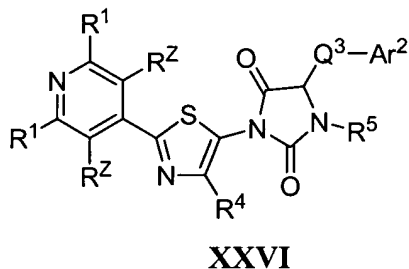
XXIV



XXV.

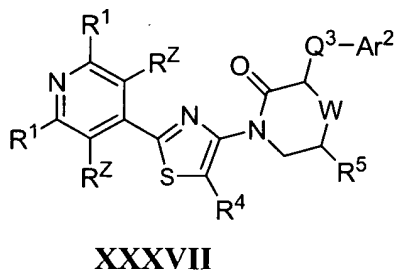
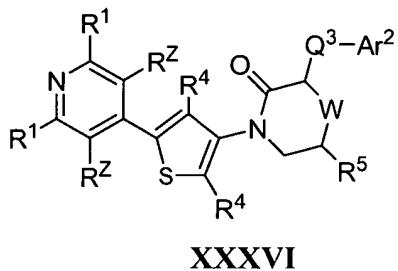
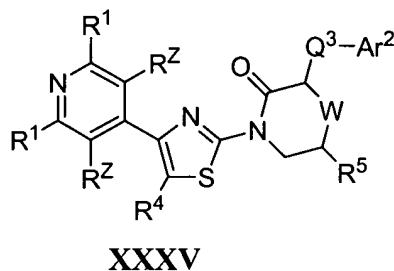
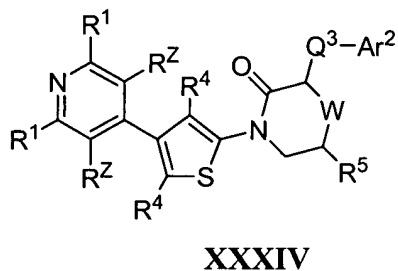
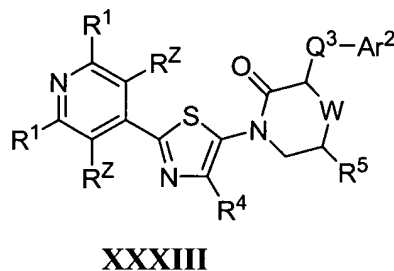
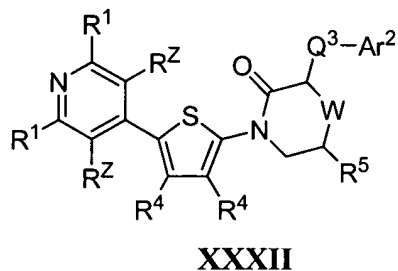
Applicants: Jingrong Cao et al.
Application No.: 10/696,862

39. (Previously presented) The compound of claim 16, R^2 and Q^1-R^3 , taken together with the atoms to which they are bound form a 5-membered cyclic group, and compounds have the general formula **XXVI** through **XXXI**:



Applicants: Jingrong Cao et al.
 Application No.: 10/696,862

40. (Previously presented) The compound of claim 16, wherein R^2 and Q^1-R^3 , taken together with the atoms to which they are bound form a 6-membered cyclic group, and compounds have the general formula **XXXII** through **XXXVII**:



wherein W is O, NR^5 , or CHR^5 .

41. (Original) The compound of claims 38, 39 or 40, wherein compound variables are selected from one of more of the following groups:

a) each occurrence of R^1 is independently hydrogen, halogen, optionally substituted C_1 - C_4 aliphatic, OR, SR, or $N(R)_2$;

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

b) each occurrence of R^Z is independently hydrogen, halogen, optionally substituted C_1 - C_4 aliphatic, OH, OR' or N(R)(R');

c) each occurrence of R^4 is independently hydrogen, C_{1-6} aliphatic, CN, COR, COOR, CON(R)₂, or halogen;

d) R^5 is hydrogen, $(CH_2)_3OR'$, $(CH_2)_2OR'$, $(CH_2)OR'$, $(CH_2)_3N(R')_2$, $(CH_2)_2N(R')_2$, $(CH_2)N(R')_2$, or C_{1-4} aliphatic;

e) Q^3 is a direct bond, or is $-(CHR^6)_q-$, $-(CHR^6)_qO-$, $-(CHR^6)_qS-$, $-(CHR^6)_qS(O)_2-$, $-(CHR^6)_qS(O)-$, $-(CHR^6)_qNR-$, or $-(CHR^6)_qC(O)-$, wherein q is 0, 1, 2, or 3; and

f) Ar^2 is ring **a, b, e, g, h, i, j, k, n, r, cc, dd, ff, jj, ll, or pp**, wherein t is 0, 1, 2, or 3, and T is a bond or is an optionally substituted C_{1-6} alkylidene chain wherein one or two methylene units are optionally and independently replaced by $-O-$, $-NR-$, $-S-$, $-SO_2-$, $-COO-$, $-CO-$, $-OSO_2-$, $-NRSO_2-$, $-CONR-$, or $-SO_2NR-$, and R^7 is R' or halogen.

42. (Previously presented) The compound of claims 38, 39 or 40, wherein compound variables are selected from one of more of the following groups:

a) each occurrence of R^1 is independently hydrogen, halogen, $-CH_3$, $-CH_2CH_3$, $-OH$, $-OCH_3$, $-SCH_3$, $-NH_2$, $-N(CH_3)_2$, $-N(CH_2CH_3)_2$, $NH(CH_2)_2NHCH_3$, $NH(cyclopropyl)$, $NH(CH_2)cyclopropyl$, or $NH(CH_2)_2N(CH_3)_2$;

b) each occurrence of R^Z is independently hydrogen, halogen, Me, OH, OMe, NH_2 , or $N(Me)_2$;

c) each occurrence of R^4 is independently hydrogen, C_{1-6} aliphatic, CN, COR, COOR, CON(R)₂, or halogen;

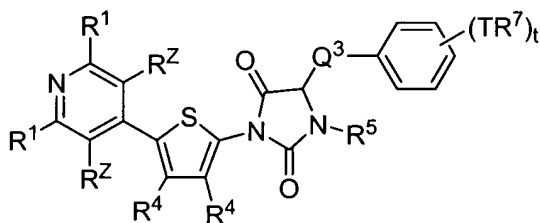
d) R^5 is hydrogen, $(CH_2)_3OR'$, $(CH_2)_2OR'$, $(CH_2)OR'$, $(CH_2)_3N(R')_2$, $(CH_2)_2N(R')_2$, $(CH_2)N(R')_2$, or C_{1-4} aliphatic;

e) Q^3 is a direct bond, or is $-(CHR^6)_q-$, $-(CHR^6)_qO-$, $-(CHR^6)_qS-$, $-(CHR^6)_qS(O)_2-$, $-(CHR^6)_qS(O)-$, $-(CHR^6)_qNR-$, or $-(CHR^6)_qC(O)-$, wherein q is 0, 1, 2, or 3; and

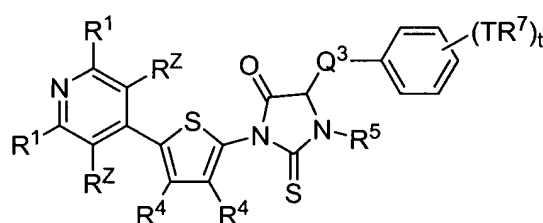
Applicants: Jingrong Cao et al.
Application No.: 10/696,862

f) Ar^2 is ring **a**, **b**, **e**, **g**, **h**, **i**, **j**, **k**, **n**, **r**, **cc**, **dd**, **ff**, **jj**, **ll**, or **pp**, wherein t is 0, 1, 2, or 3, and each occurrence of TR^7 is independently $-C_{1-3}alkyl$, $-OR'$, $-SR'$, $-CF_3$, $-OCF_3$, $-SCF_3$, $-F$, $-Cl$, I , $-Br$, $-COOR'$, $-COR'$, $-O(CH_2)_4N(R)(R')$, $-O(CH_2)_3N(R)(R')$, $-O(CH_2)_2N(R)(R')$, $-O(CH_2)N(R)(R')$, $-O(CH_2)_4CON(R)(R')$, $-O(CH_2)_3CON(R)(R')$, $-O(CH_2)_2CON(R)(R')$, $-O(CH_2)CON(R)(R')$, $-C(O)N(R)(R')$, $-(CH_2)_4OR'$, $-(CH_2)_3OR'$, $-(CH_2)_2OR'$, $-CH_2OR'$, optionally substituted phenyl or benzyl, $-N(R)(R')$, $-(CH_2)_4N(R)(R')$, $-(CH_2)_3N(R)(R')$, $-(CH_2)_2N(R)(R')$, $-(CH_2)N(R)(R')$, $-SO_2N(R)(R')$, $-NRSO_2R'$, $-CON(R)(R')$, or $-OSO_2R'$.

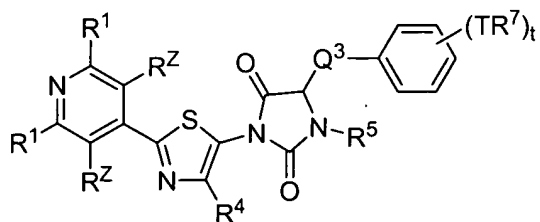
43. (Previously presented) The compound of claims 38, 39 or 40, wherein Ar^2 is optionally substituted phenyl and compounds of general formula **XX-A**, through **XXXVII** are provided:



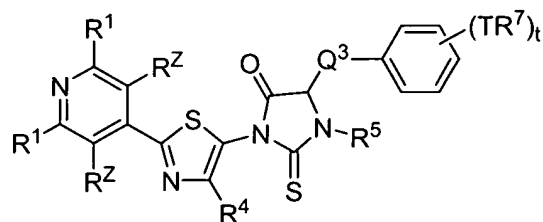
XX-A



XXI-A

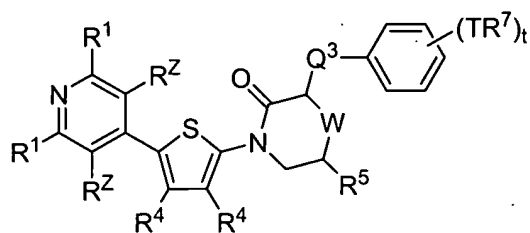


XXII-A

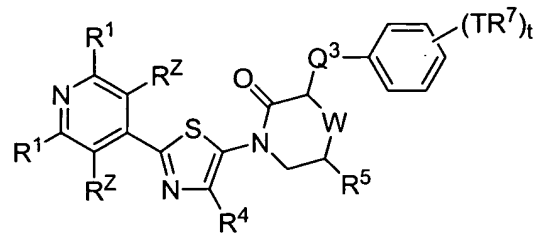


XXIII-A

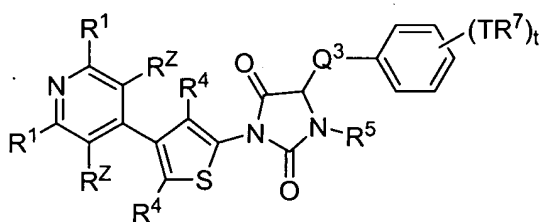
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



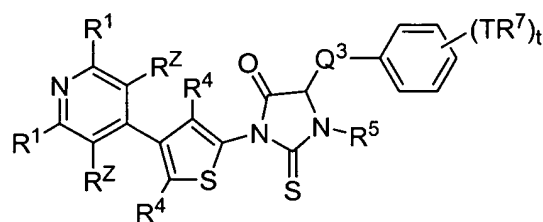
XXIV-A



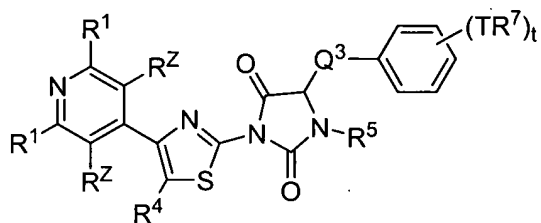
XXV-A



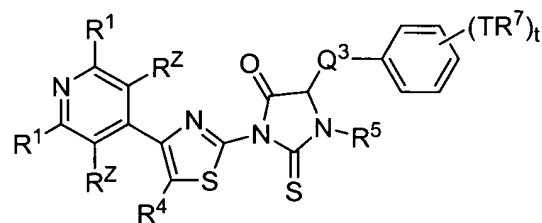
XXVI-A



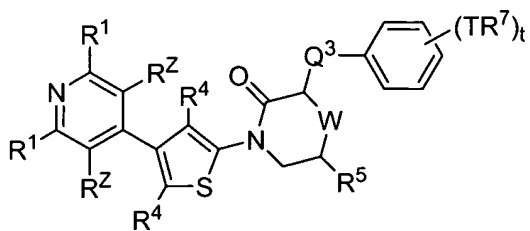
XXVII-A



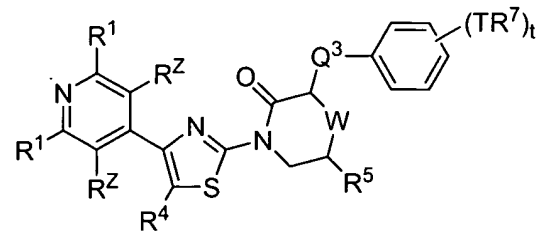
XXVIII-A



XXIX-A

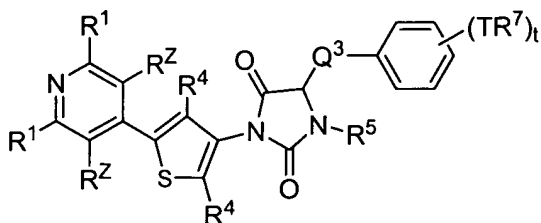


XXX-A

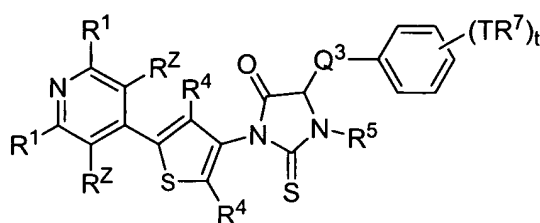


XXXI-A

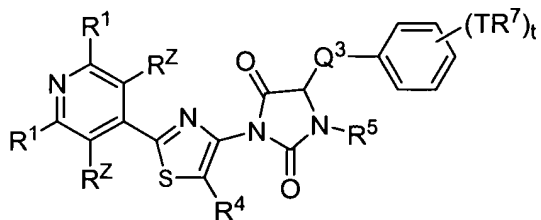
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



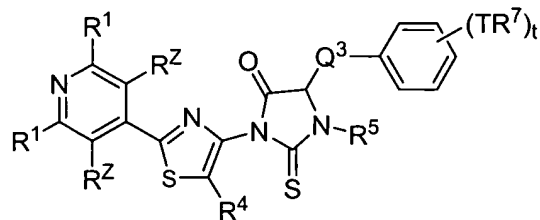
XXXII-A



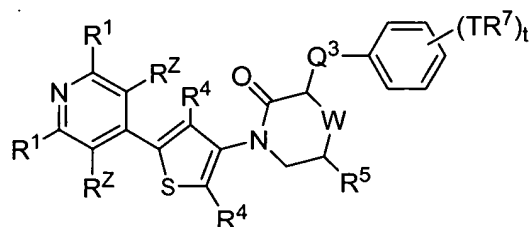
XXXIII-A



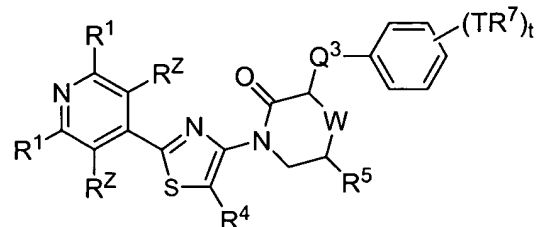
XXXIV-A



XXXV-A



XXXVI-A



XXXVII-A.

44. (Previously presented) The compound of claim 43, wherein compound variables are selected from:

each occurrence of R^1 is hydrogen;

each occurrence of R^Z is hydrogen;

each occurrence of R^4 is independently hydrogen, C_{1-6} aliphatic, CN, COR, COOR, CON(R)₂, or halogen;

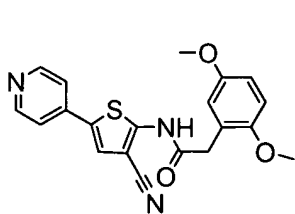
R^5 is hydrogen, $(CH_2)_3OR'$, $(CH_2)_2OR'$, $(CH_2)OR'$, $(CH_2)_3N(R')_2$, $(CH_2)_2N(R')_2$, $(CH_2)N(R')_2$, or C_{1-4} aliphatic;

Applicants: Jingrong Cao et al.
 Application No.: 10/696,862

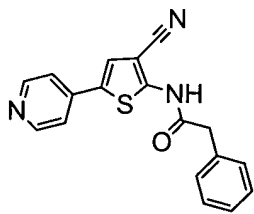
Q^3 is a direct bond, or is $-(CHR^6)_q-$, $-(CHR^6)_qO-$, $-(CHR^6)_qS-$, $-(CHR^6)_qS(O)_2-$, $-(CHR^6)_qS(O)-$, $-(CHR^6)_qNR-$, or $-(CHR^6)_qC(O)-$, wherein q is 0, 1, 2, or 3; and

t is 0, 1, 2, or 3, and each occurrence of TR^7 is independently $-C_{1-3}alkyl$, $-OR'$, $-SR'$, $-CF_3$, $-OCF_3$, $-SCF_3$, $-F$, $-Cl$, I , $-Br$, $-COOR'$, $-COR'$, $-O(CH_2)_4N(R)(R')$, $-O(CH_2)_3N(R)(R')$, $-O(CH_2)_2N(R)(R')$, $-O(CH_2)N(R)(R')$, $-O(CH_2)_4CON(R)(R')$, $-O(CH_2)_3CON(R)(R')$, $-O(CH_2)_2CON(R)(R')$, $-O(CH_2)CON(R)(R')$, $-C(O)N(R)(R')$, $-(CH_2)_4OR'$, $-(CH_2)_3OR'$, $-(CH_2)_2OR'$, $-CH_2OR'$, optionally substituted phenyl or benzyl, $-N(R)(R')$, $-(CH_2)_4N(R)(R')$, $-(CH_2)_3N(R)(R')$, $-(CH_2)_2N(R)(R')$, $-(CH_2)N(R)(R')$, $-SO_2N(R)(R')$, $-NRSO_2R'$, $-CON(R)(R')$, or $-OSO_2R'$.

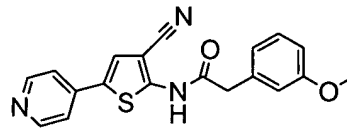
45. (Currently amended) The compound of claim 1, having one of the structures:



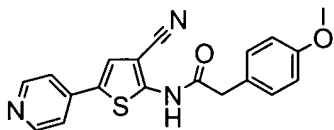
I-A-1



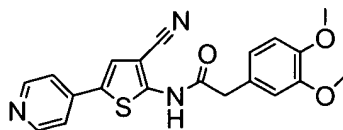
I-A-2



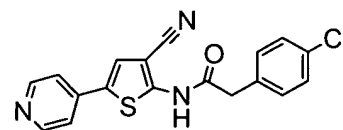
I-A-3



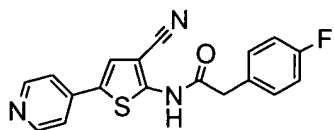
I-A-4



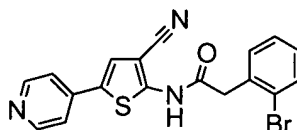
I-A-5



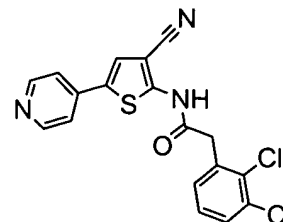
I-A-6



I-A-7

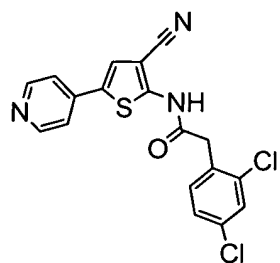


I-A-8

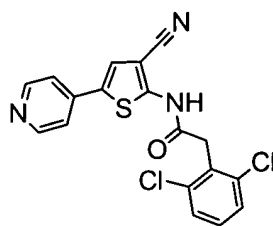


I-A-9

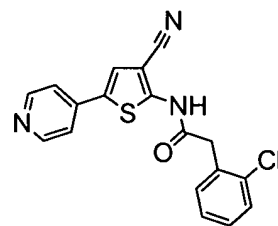
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



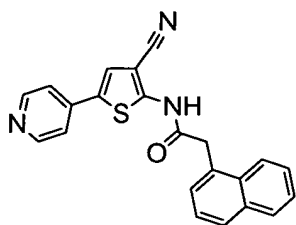
I-A-10



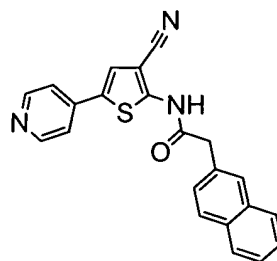
I-A-11



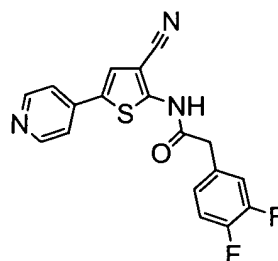
I-A-12



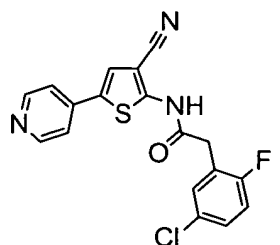
I-A-13



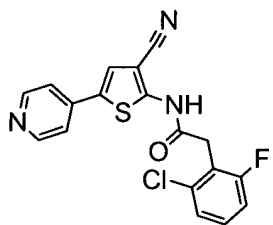
I-A-14



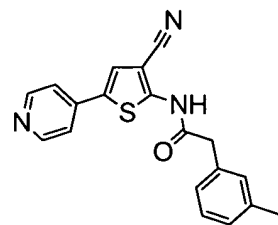
I-A-15



I-A-16

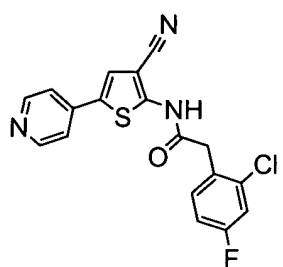


I-A-17

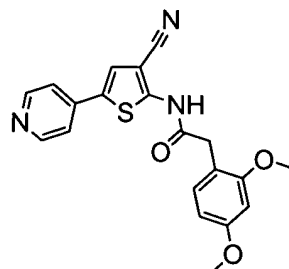


I-A-18

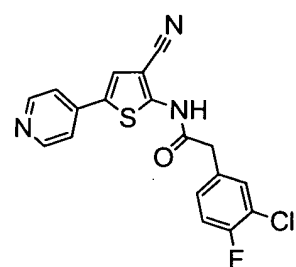
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



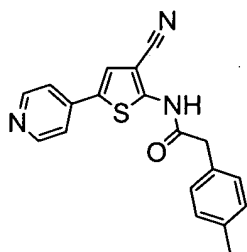
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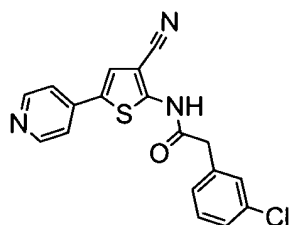
I-A-20



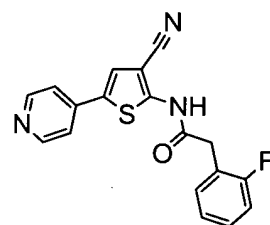
I-A-21



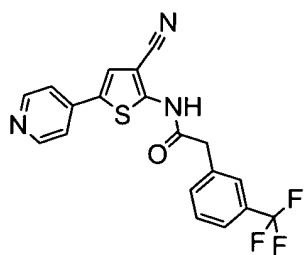
I-A-22



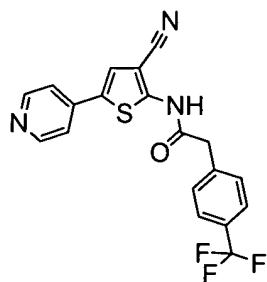
I-A-23



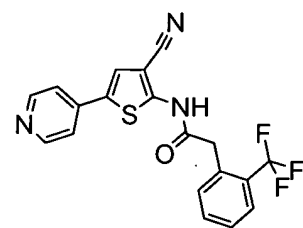
I-A-24



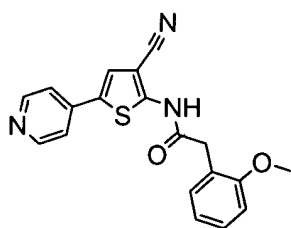
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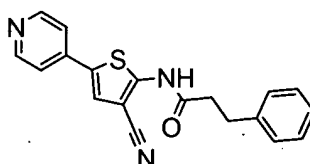
I-A-26



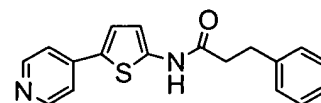
I-A-27



I-A-28

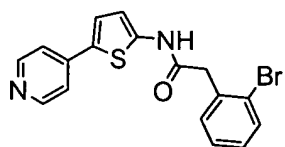


I-A-29

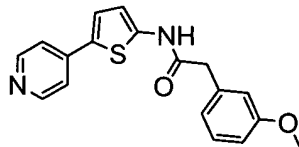


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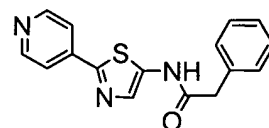
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



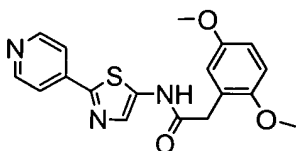
I-A-31



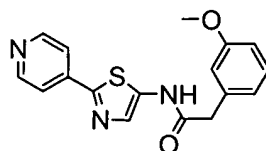
I-A-32



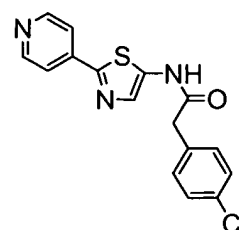
I-A-33



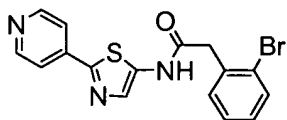
I-A-34



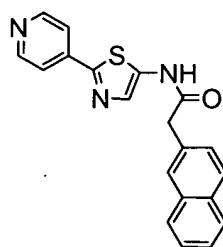
I-A-35



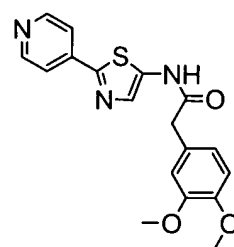
I-A-36



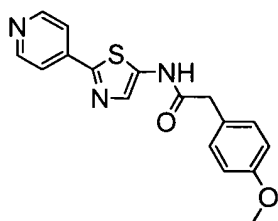
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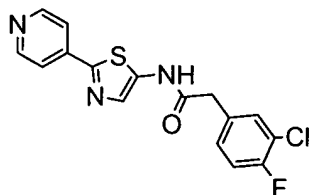
I-A-38



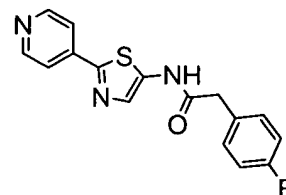
I-A-39



I-A-40

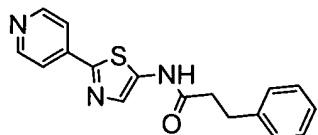


I-A-41

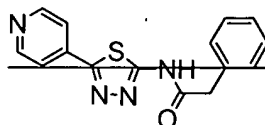


I-A-42

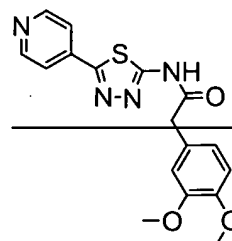
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



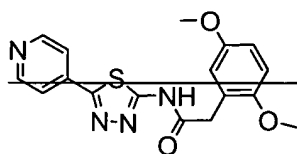
I-A-43



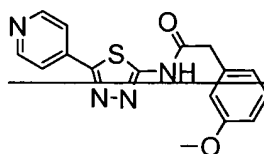
I-A-44



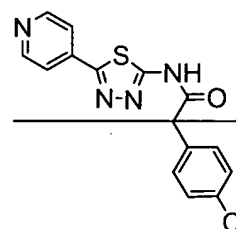
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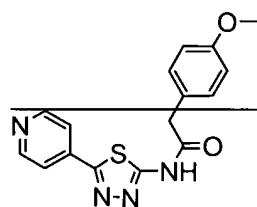
I-A-46



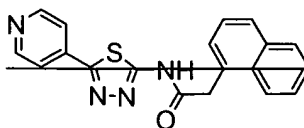
I-A-47



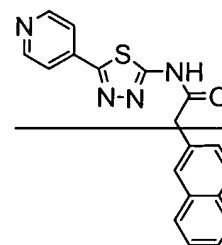
I-A-48



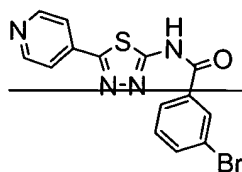
I-A-49



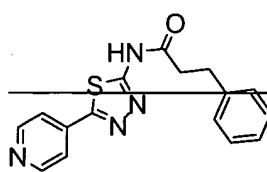
I-A-50



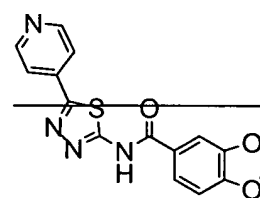
I-A-51



I-A-52

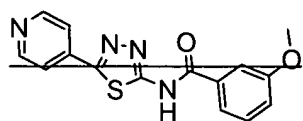


I-A-53

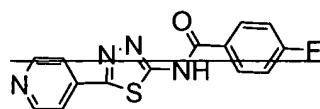


I-A-54

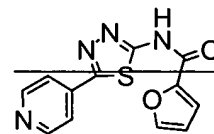
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



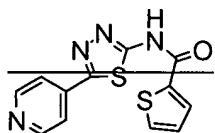
I-A-55



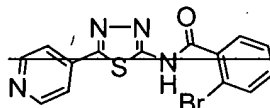
I-A-56



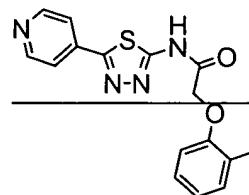
I-A-57



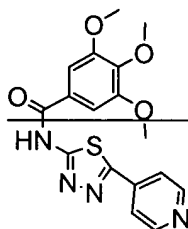
I-A-58



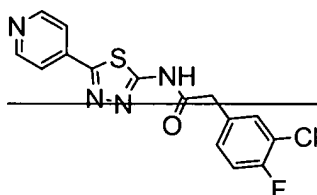
I-A-59



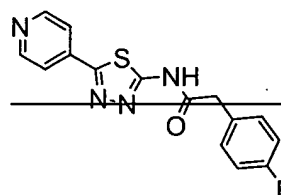
I-A-60



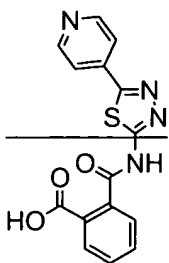
I-A-61



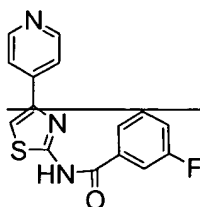
I-A-62



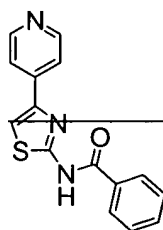
I-A-63



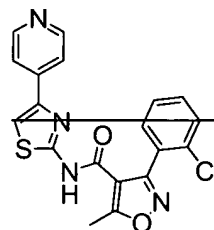
I-A-64



I-B-1

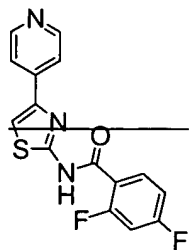


I-B-2

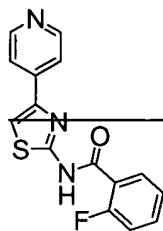


I-B-3

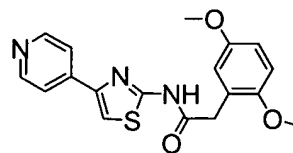
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



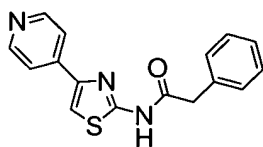
I-B-4



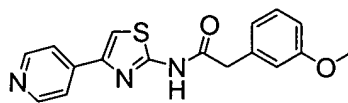
I-B-5



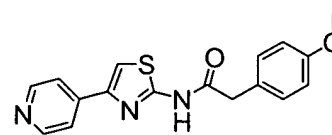
I-B-6



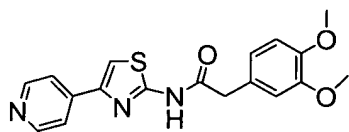
I-B-19



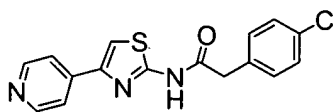
I-B-20



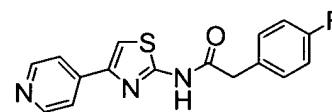
I-B-21



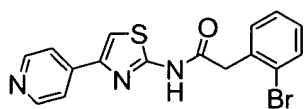
I-B-22



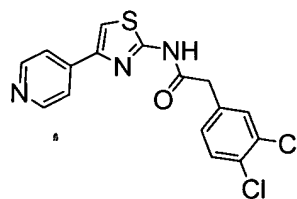
I-B-23



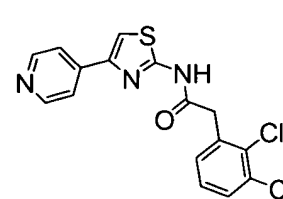
I-B-24



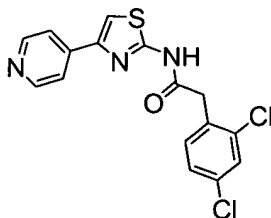
I-B-25



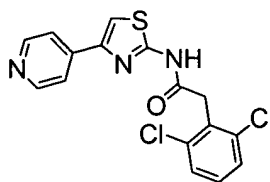
I-B-26



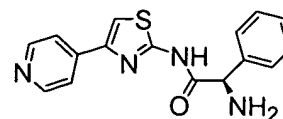
I-B-27



I-B-28

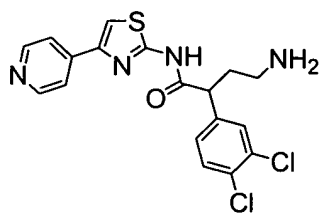


I-B-29

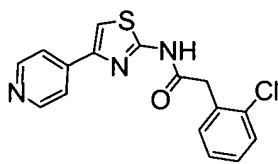


I-B-30

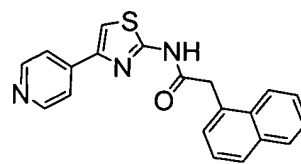
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



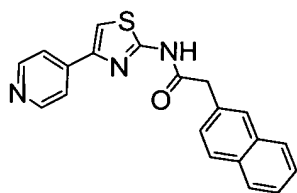
I-B-31



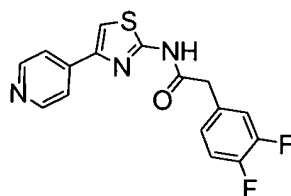
I-B-32



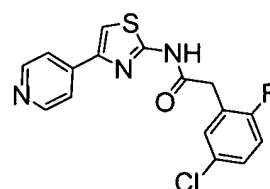
I-B-33



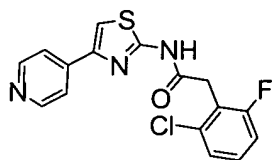
I-B-34



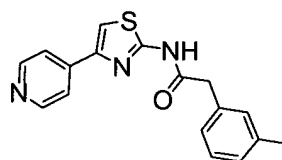
I-B-35



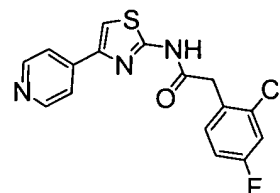
I-B-36



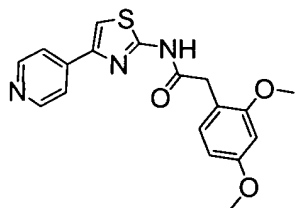
I-B-37



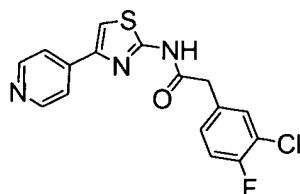
I-B-38



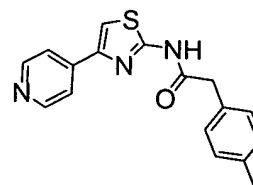
I-B-39



I-B-40

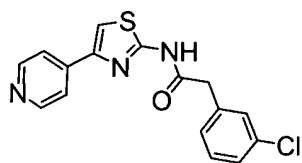


I-B-41

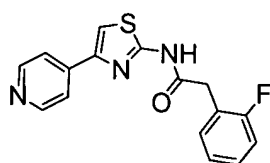


I-B-42

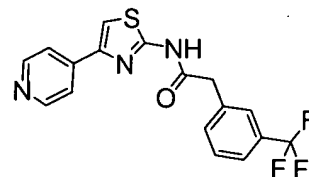
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



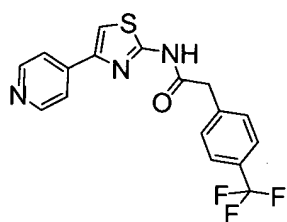
I-B-43



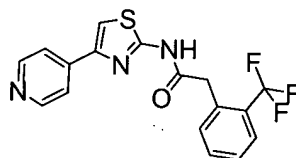
I-B-44



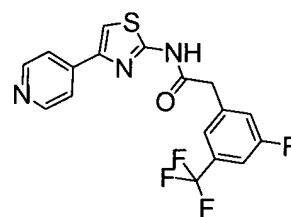
I-B-45



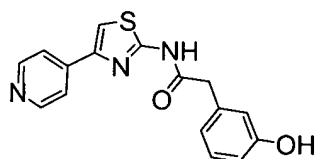
I-B-46



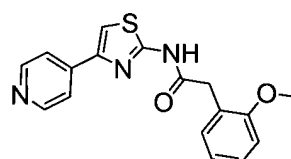
I-B-47



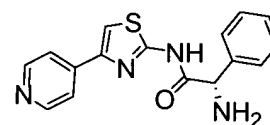
I-B-48



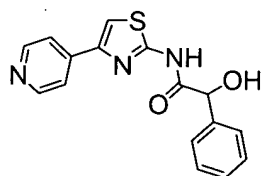
I-B-49



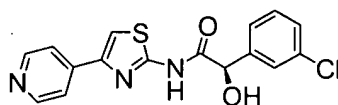
I-B-50



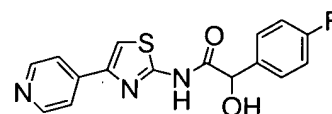
I-B-51



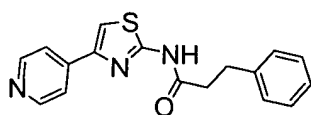
I-B-52



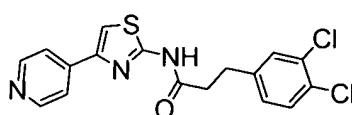
I-B-53



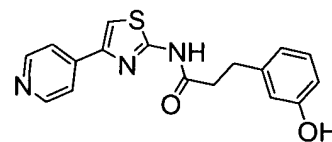
I-B-54



I-B-55

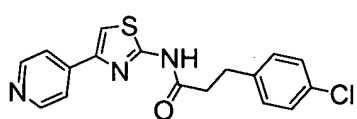


I-B-56

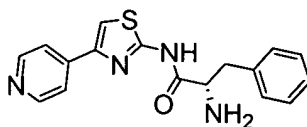


I-B-57

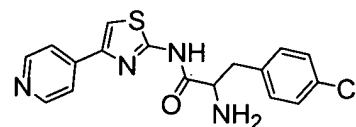
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



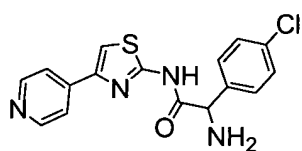
I-B-58



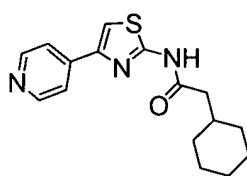
I-B-59



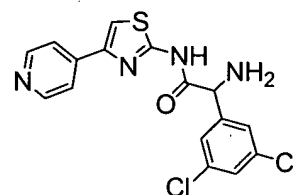
I-B-60



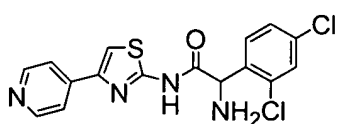
I-B-61



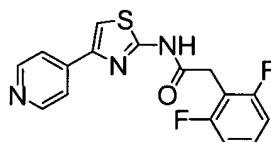
I-B-62



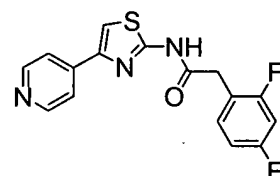
I-B-63



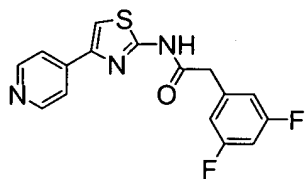
I-B-64



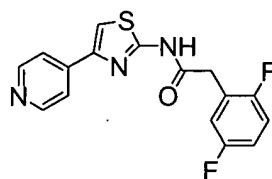
I-B-65



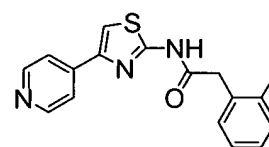
I-B-66



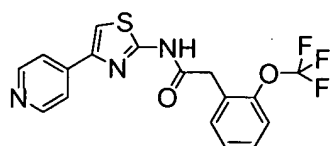
I-B-67



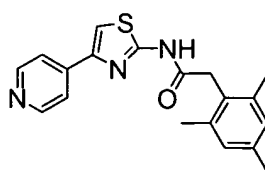
I-B-68



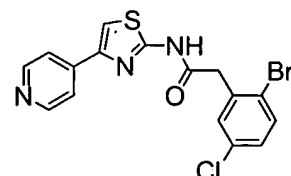
I-B-69



I-B-70

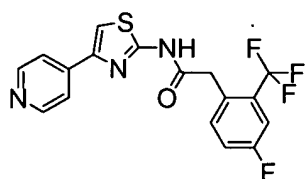


I-B-71

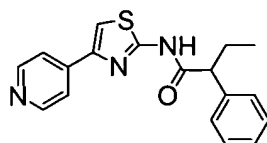


I-B-72

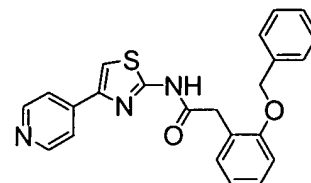
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



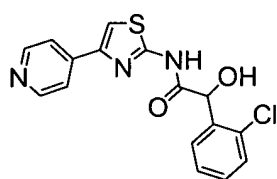
I-B-73



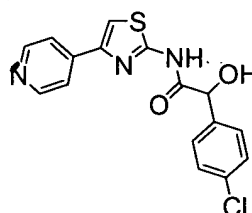
I-B-74



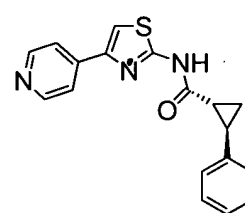
I-B-75



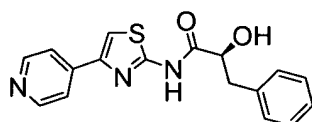
I-B-76



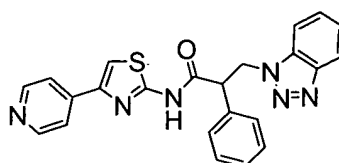
I-B-77



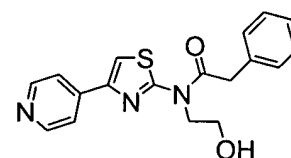
I-B-78



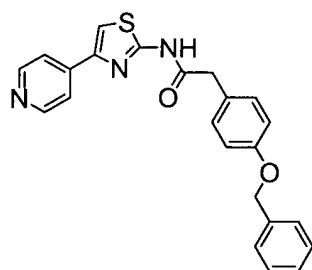
I-B-79



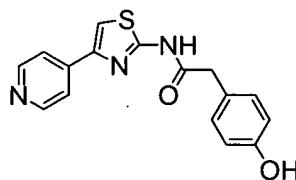
I-B-80



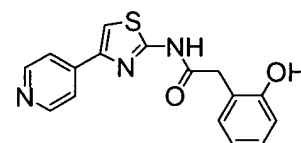
I-B-81



I-B-82

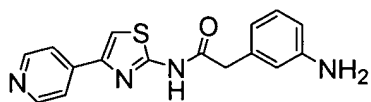


I-B-83

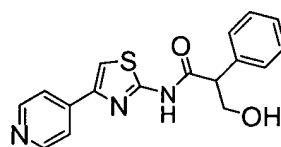


I-B-84

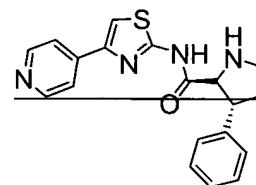
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



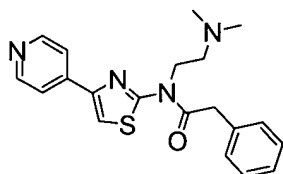
I-B-85



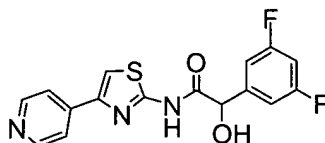
I-B-86



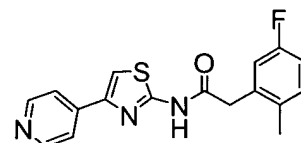
I-B-87



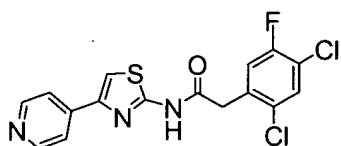
I-B-88



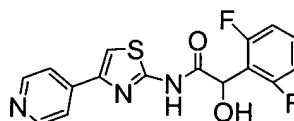
I-B-89



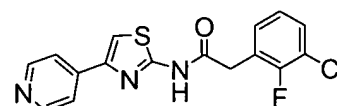
I-B-90



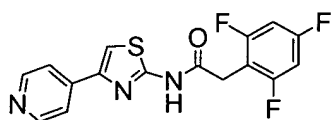
I-B-91



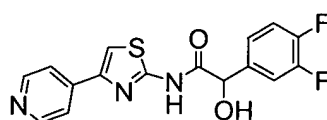
I-B-92



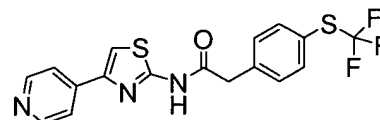
I-B-93



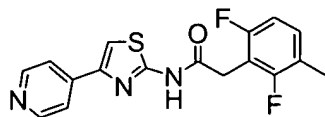
I-B-94



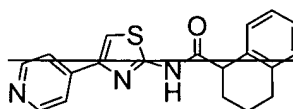
I-B-95



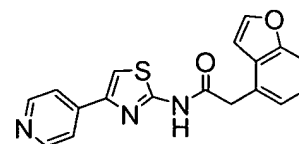
I-B-96



I-B-97

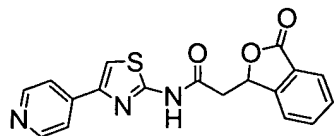


I-B-98

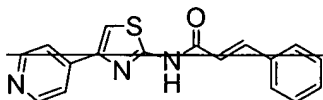


I-B-99

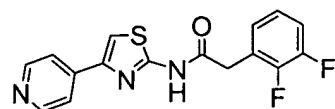
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



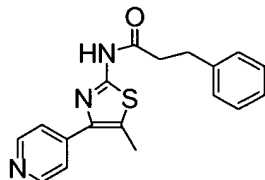
I-B-100



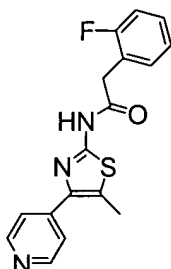
I-B-101



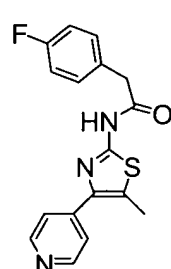
I-B-102



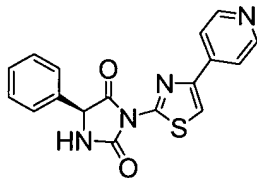
I-B-103



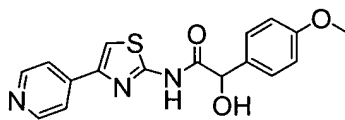
I-B-104



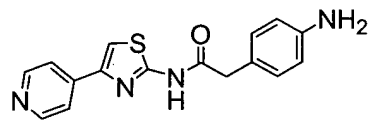
I-B-105



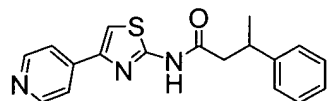
I-B-106



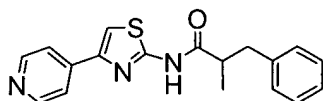
I-B-107



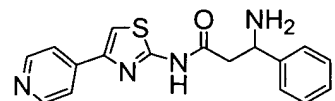
I-B-108



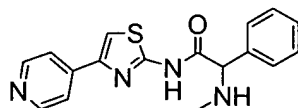
I-B-109



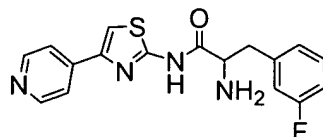
I-B-110



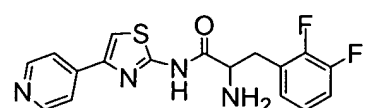
I-B-111



I-B-112

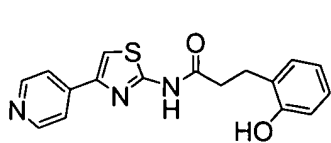


I-B-113

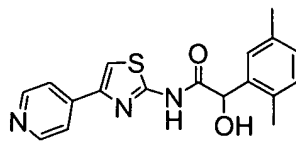


I-B-114

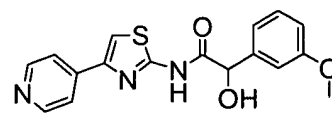
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



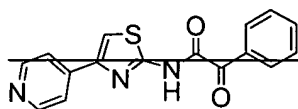
I-B-115



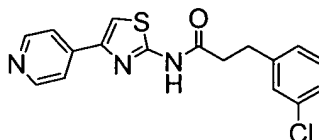
I-B-116



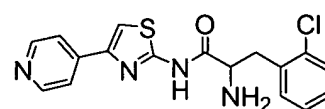
I-B-117



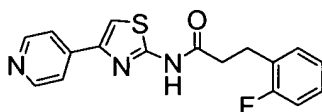
I-B-118



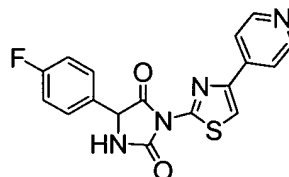
I-B-119



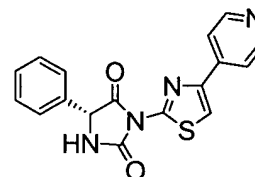
I-B-120



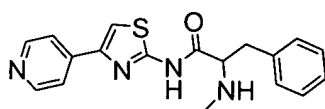
I-B-121



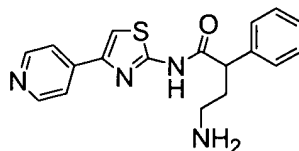
I-B-122



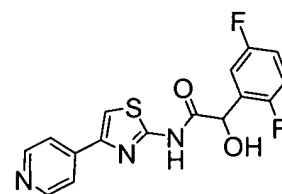
I-B-123



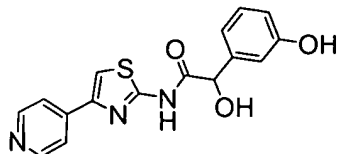
I-B-124



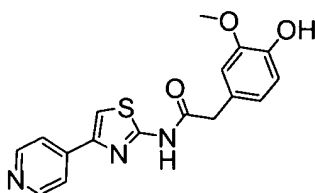
I-B-125



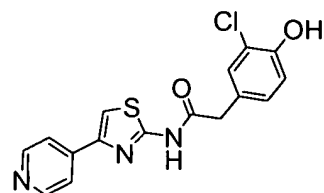
I-B-126



I-B-127

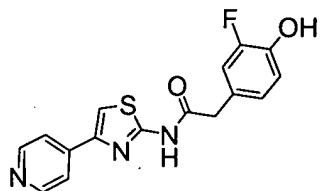


I-B-128

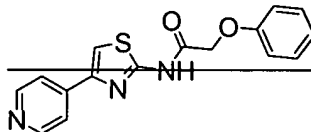


I-B-129

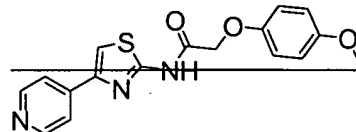
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



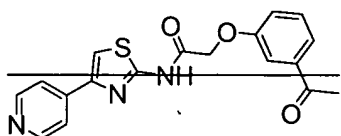
I-B-130



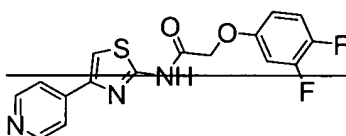
I-B-131



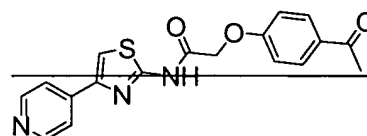
I-B-132



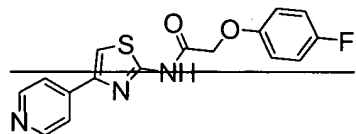
I-B-133



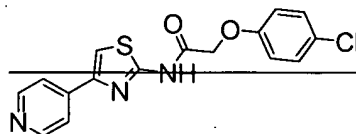
I-B-134



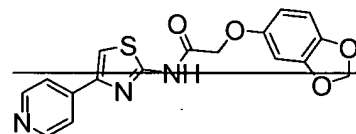
I-B-135



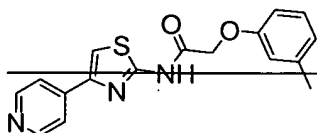
I-B-136



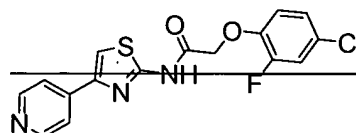
I-B-137



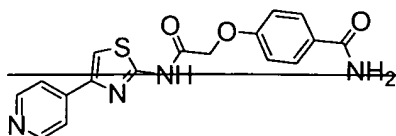
I-B-138



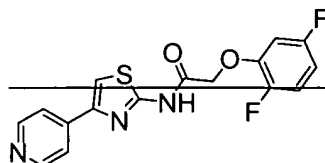
I-B-141



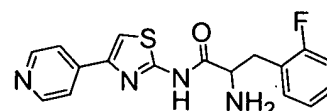
I-B-142



I-B-143

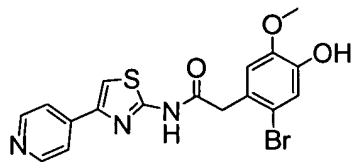


I-B-144

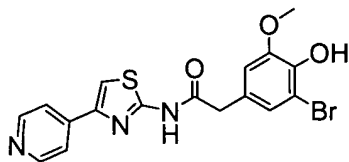


I-B-146

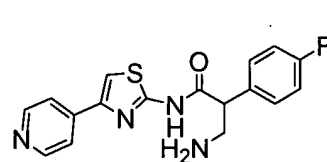
Applicants: Jingrong Cao et al.
 Application No.: 10/696,862



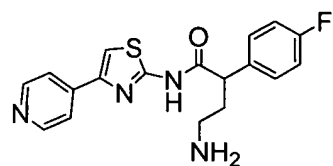
I-B-148



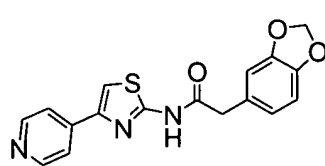
I-B-149



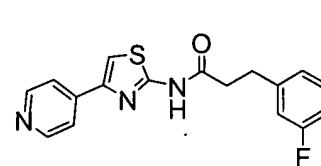
I-B-150



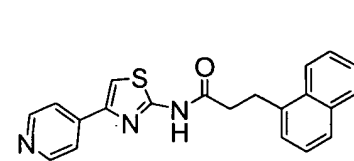
I-B-151



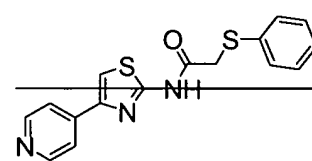
I-B-152



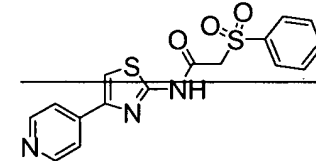
I-B-153



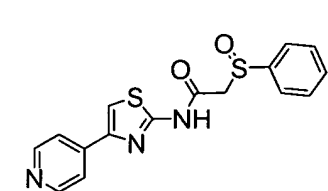
I-B-154



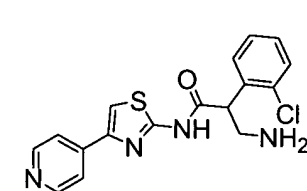
I-B-155



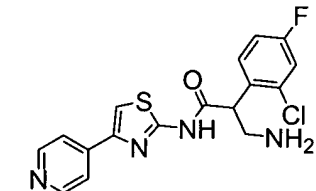
I-B-156



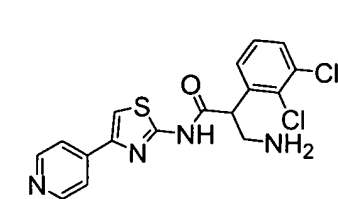
I-B-157



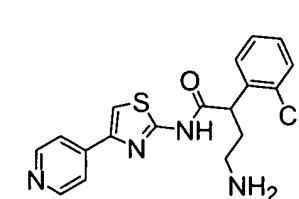
I-B-158



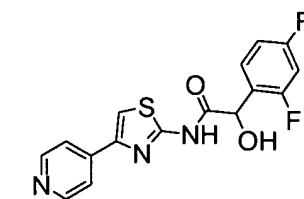
I-B-159



I-B-160

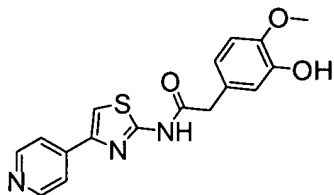


I-B-161

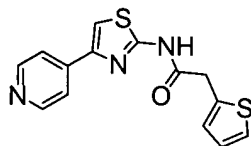


I-B-162

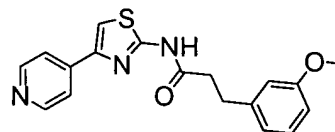
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



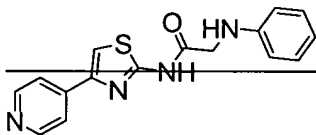
I-B-163



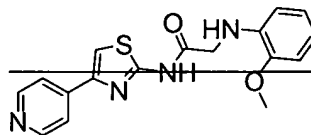
I-B-164



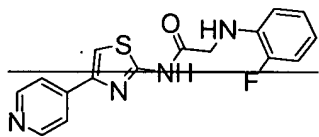
I-B-165



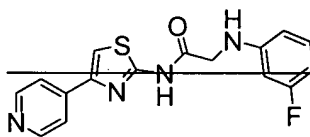
I-B-167



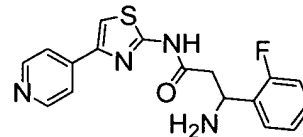
I-B-168



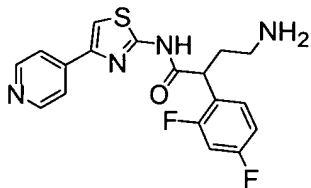
I-B-169



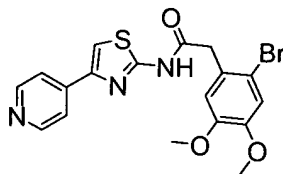
I-B-170



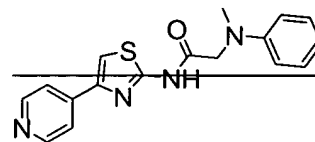
I-B-171



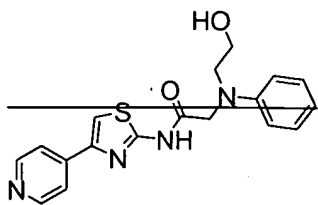
I-B-175



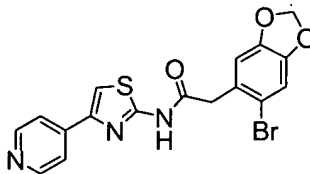
I-B-176



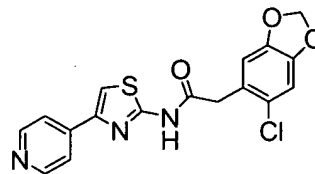
I-B-177



I-B-178

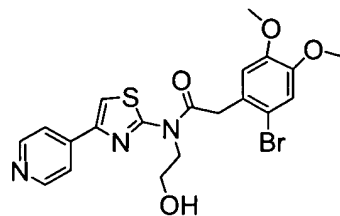


I-B-179

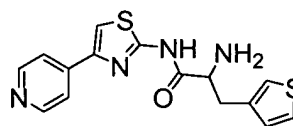


I-B-180

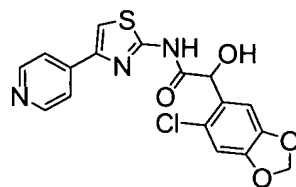
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



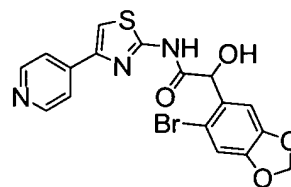
I-B-181



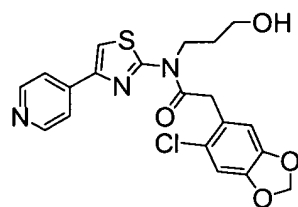
I-B-182



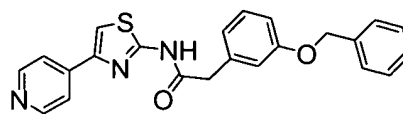
I-B-185



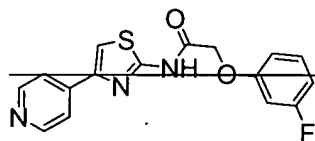
I-B-186



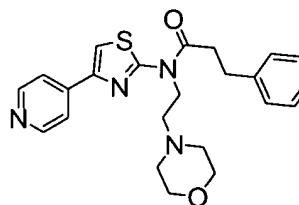
I-B-187



I-B-190

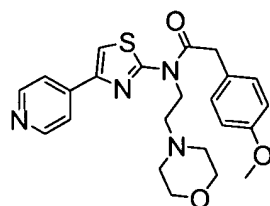


I-B-191

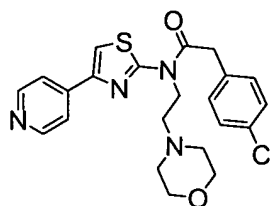


I-B-192

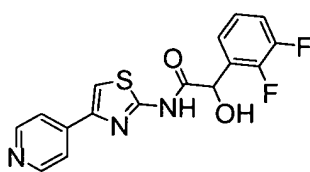
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



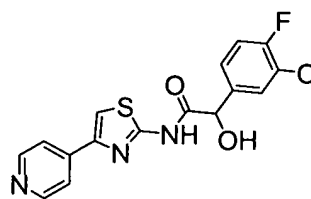
I-B-193



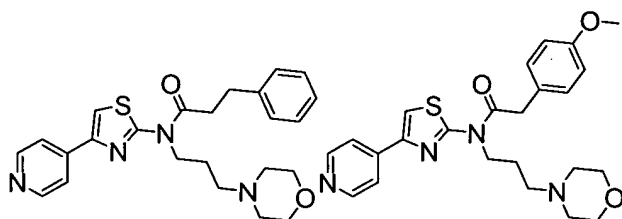
I-B-194



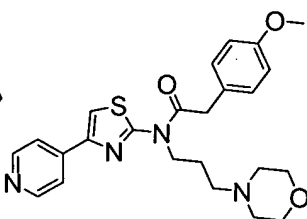
I-B-197



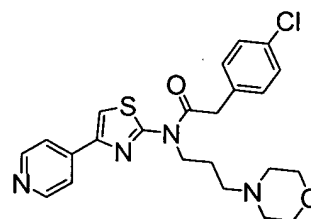
I-B-198



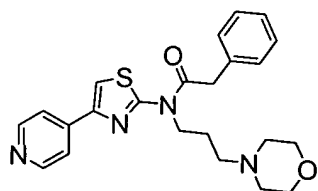
I-B-199



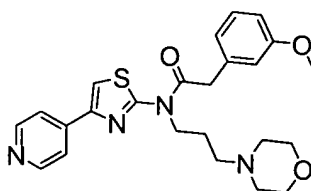
I-B-200



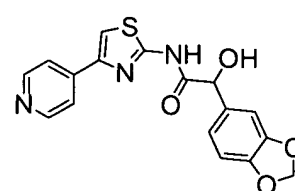
I-B-201



I-B-202

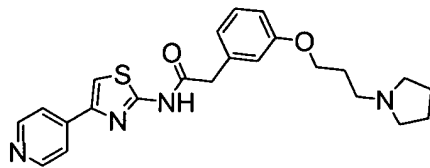


I-B-203

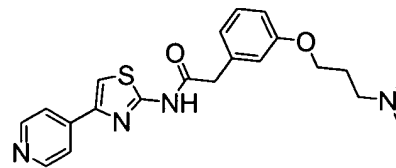


I-B-204

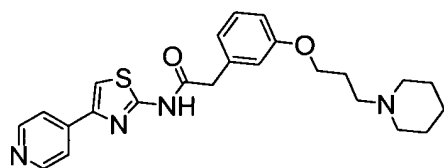
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



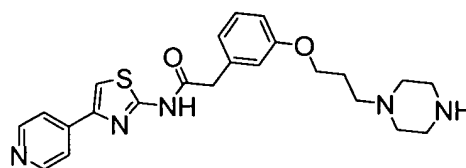
I-B-205



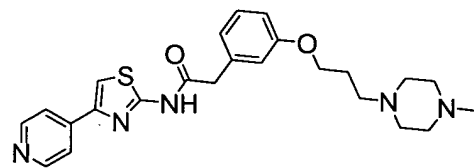
I-B-206



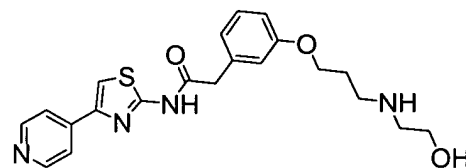
I-B-207



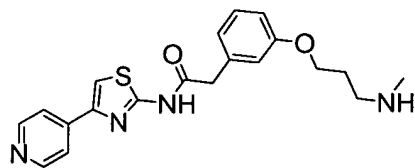
I-B-208



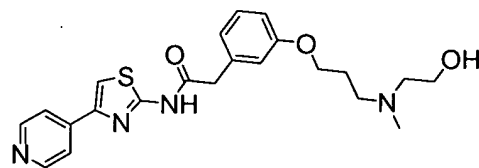
I-B-209



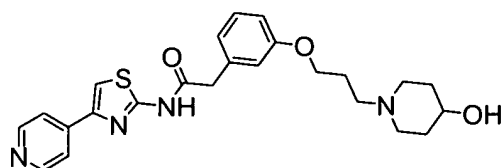
I-B-210



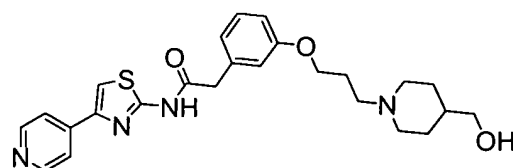
I-B-211



I-B-212

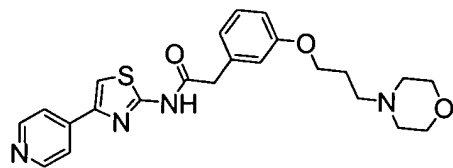


I-B-213

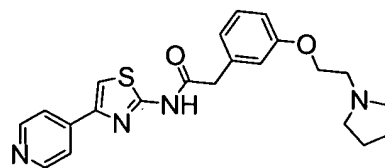


I-B-214

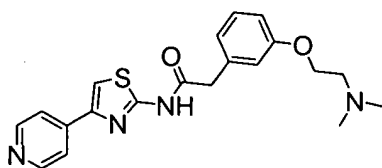
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



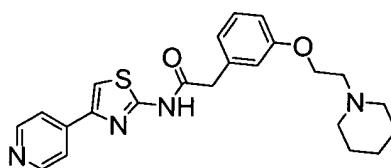
I-B-215



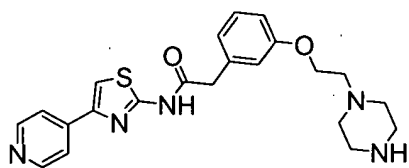
I-B-216



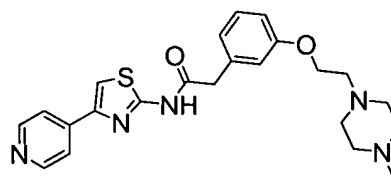
I-B-217



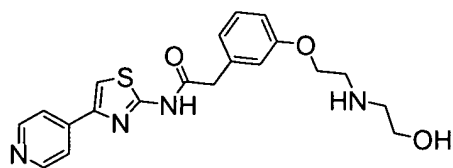
I-B-218



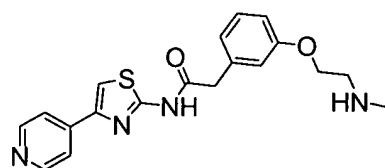
I-B-219



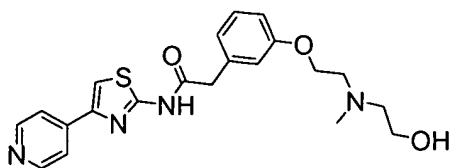
I-B-220



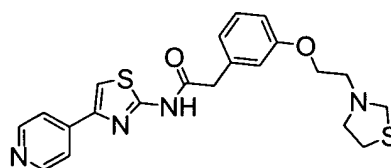
I-B-221



I-B-222

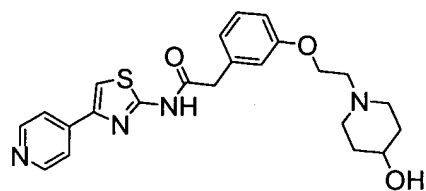


I-B-223

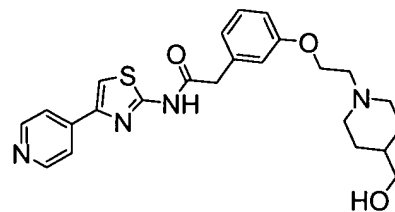


I-B-224

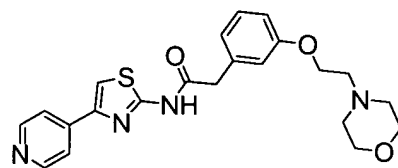
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



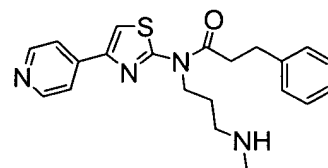
I-B-225



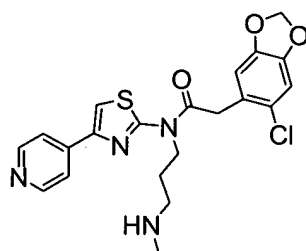
I-B-226



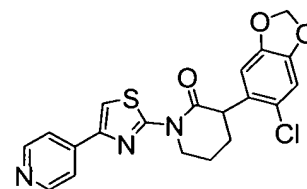
I-B-227



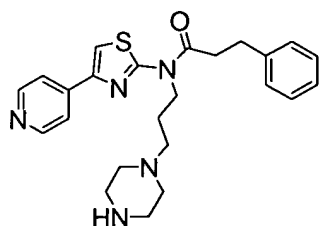
I-B-228



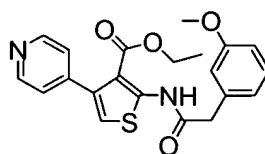
I-B-229



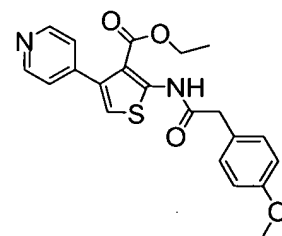
I-B-230



I-B-231

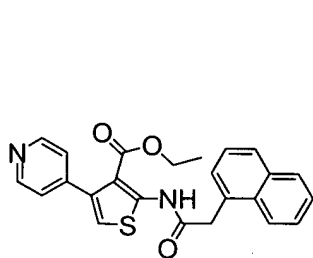


I-B-232

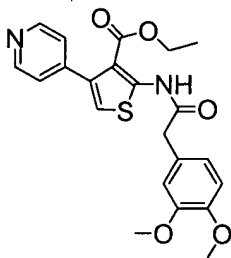


I-B-233

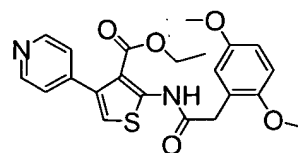
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



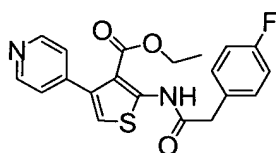
I-B-234



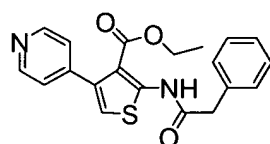
I-B-235



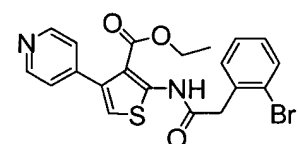
I-B-236



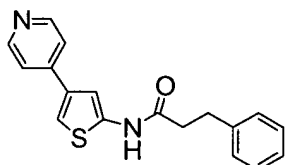
I-B-237



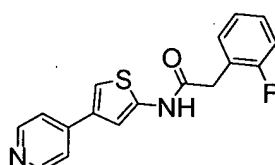
I-B-238



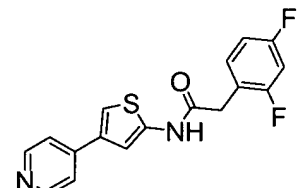
I-B-239



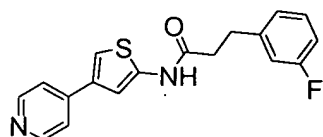
I-B-240



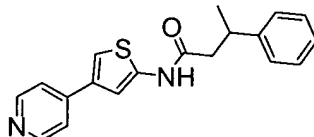
I-B-241



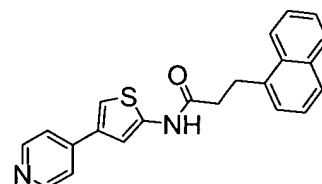
I-B-242



I-B-243

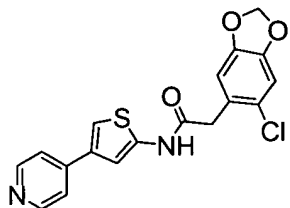


I-B-244

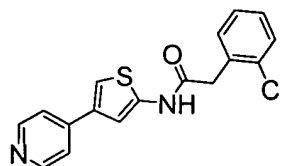


I-B-245

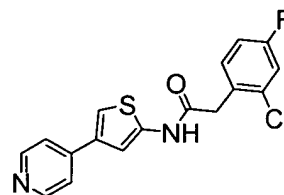
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



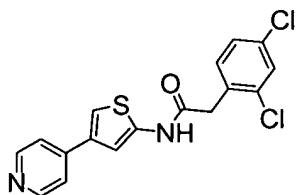
I-B-246



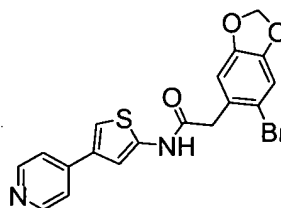
I-B-247



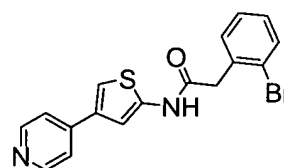
I-B-248



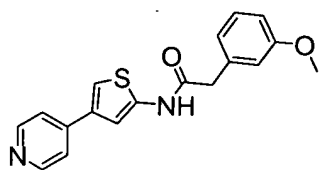
I-B-249



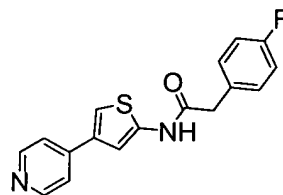
I-B-250



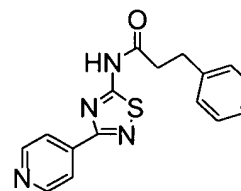
I-B-251



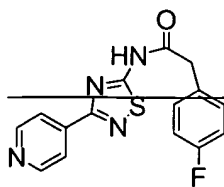
I-B-252



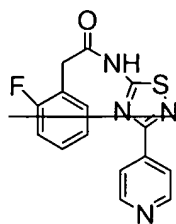
I-B-253



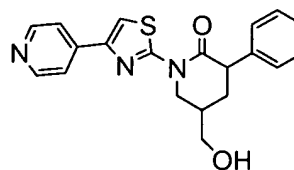
I-B-254



I-B-255

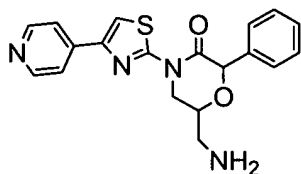


I-B-256

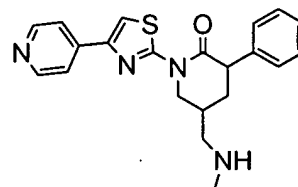


I-B-275

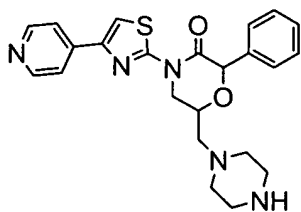
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



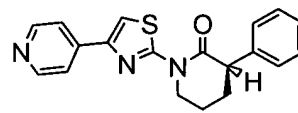
I-B-276



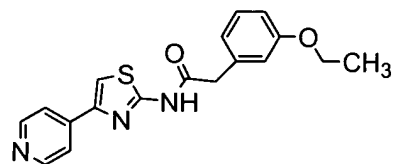
I-B-277



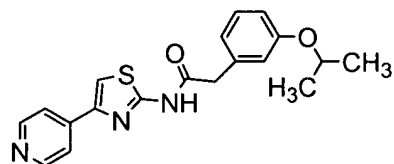
I-B-278



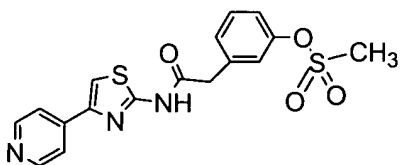
I-B-279



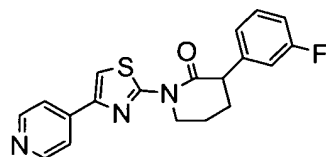
I-B-280



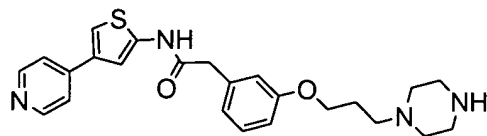
I-B-281



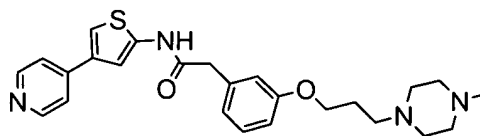
I-B-282



I-B-283

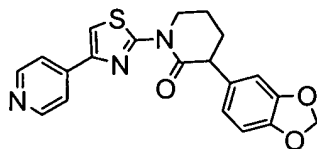


I-B-284

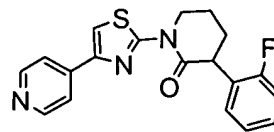


I-B-285

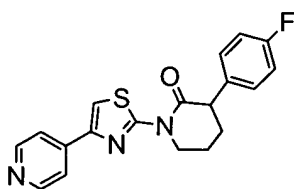
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



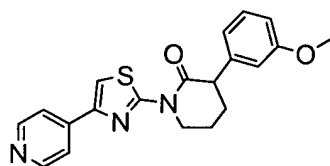
I-B-286



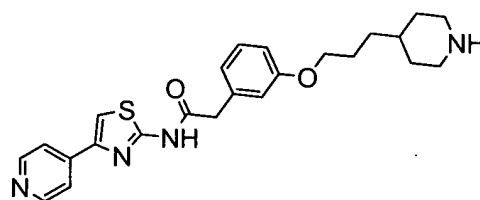
I-B-287



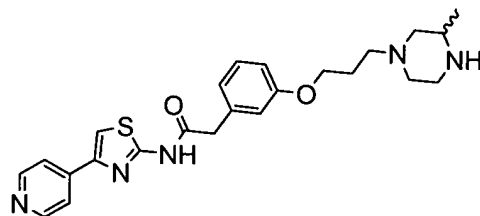
I-B-288



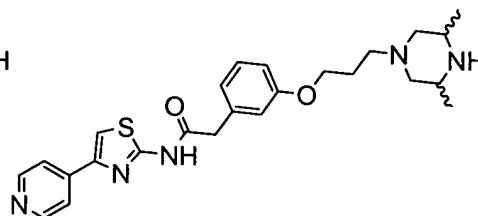
I-B-289



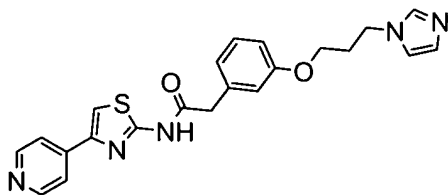
I-B-290



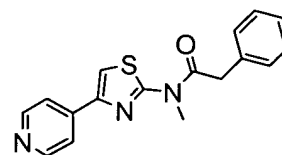
I-B-291



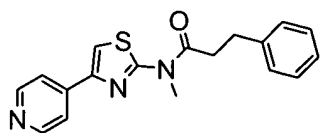
I-B-292



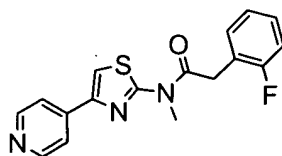
I-B-293



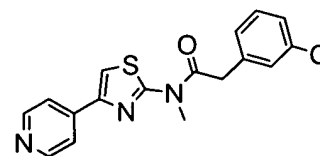
I-B-294



I-B-295

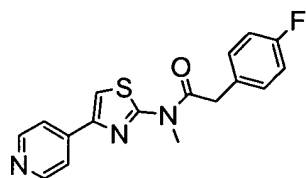


I-B-296

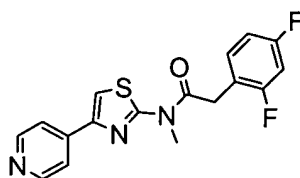


I-B-297

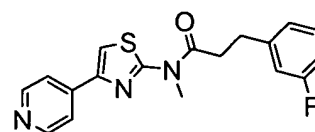
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



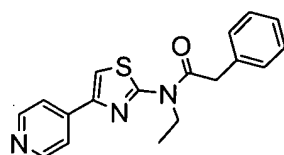
I-B-298



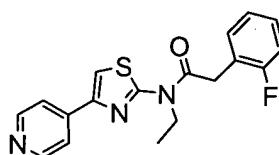
I-B-299



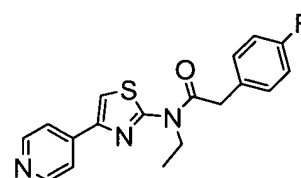
I-B-300



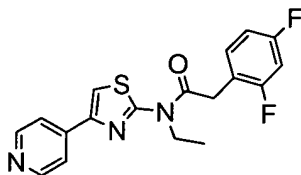
I-B-301



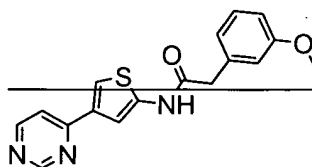
I-B-302



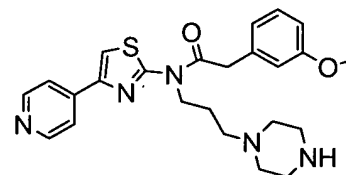
I-B-303



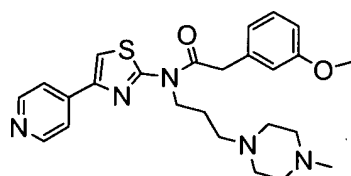
I-B-304



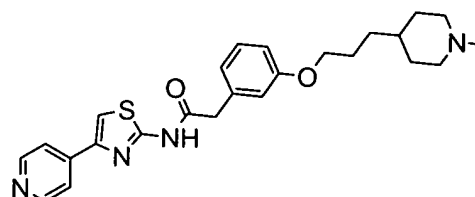
I-B-305



I-B-306

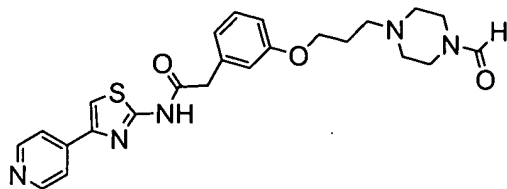


I-B-307

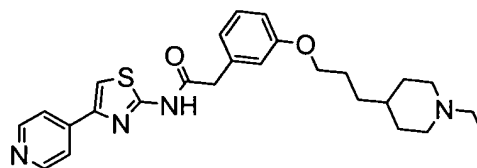


I-B-308

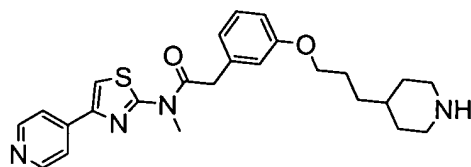
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



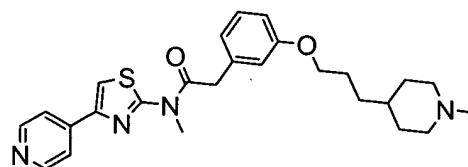
I-B-309



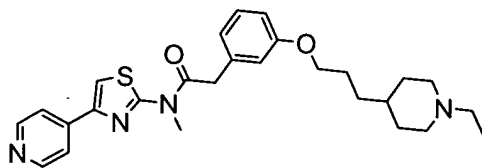
I-B-312



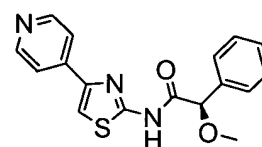
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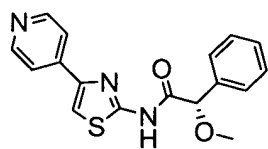
I-B-314



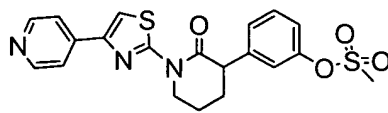
I-B-315



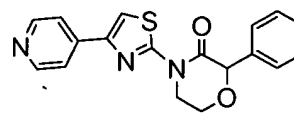
I-B-321



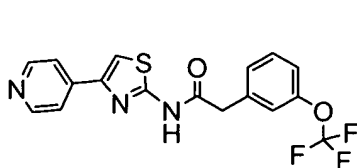
I-B-322



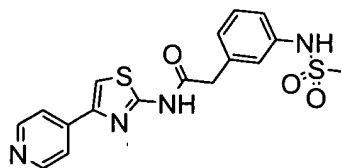
I-B-323



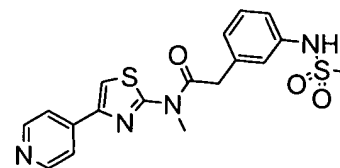
I-B-324



I-B-325

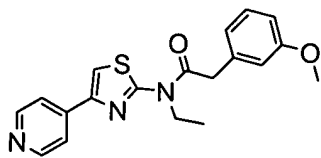


I-B-326

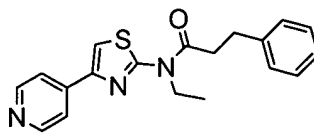


I-B-327

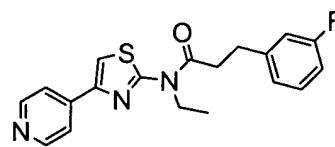
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



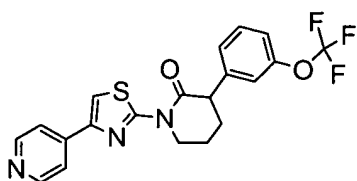
I-B-328



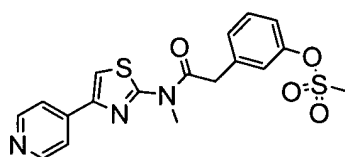
I-B-329



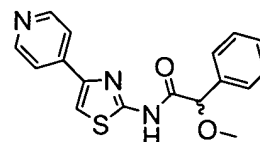
I-B-330



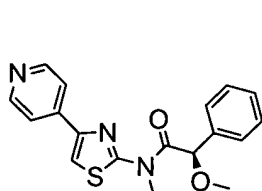
I-B-331



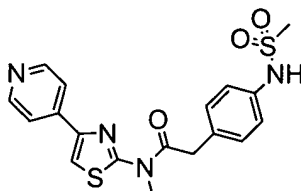
I-B-332



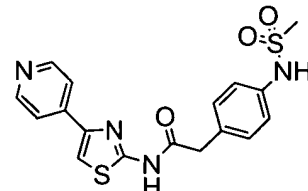
I-B-333



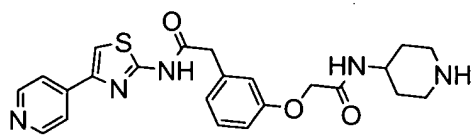
I-B-334



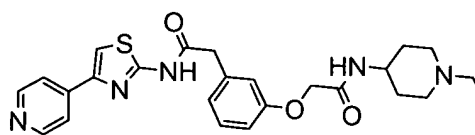
I-B-335



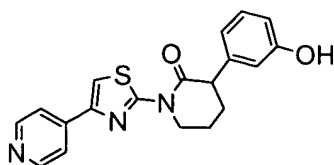
I-B-336



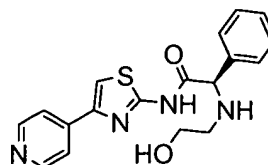
I-B-337



I-B-338

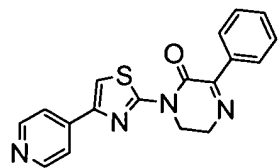


I-B-339

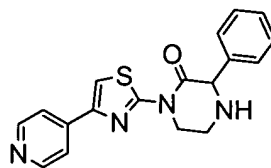


I-B-340

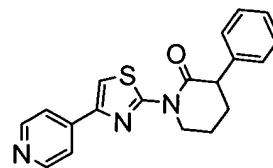
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



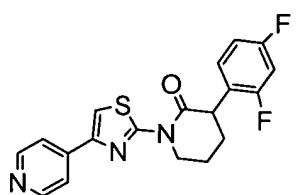
I-B-341



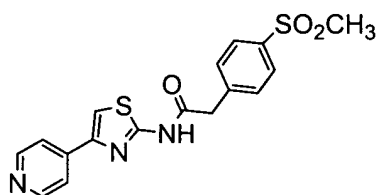
I-B-342



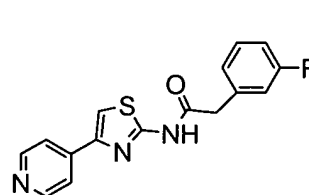
I-B-343



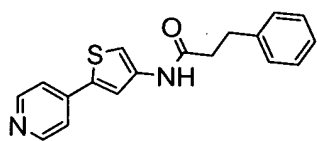
I-B-344



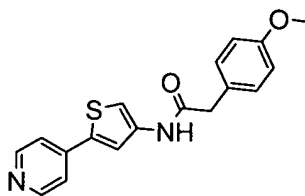
I-B-345



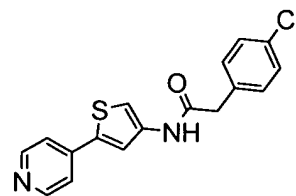
I-B-346



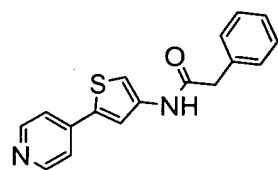
I-C-1



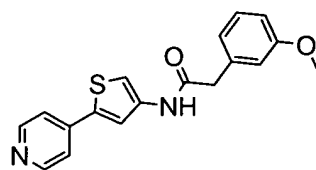
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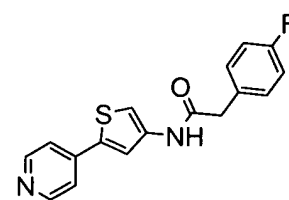
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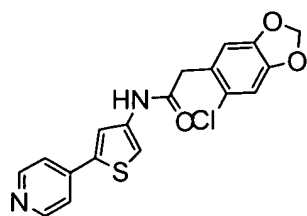
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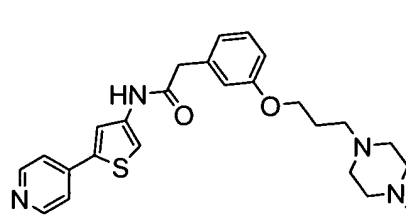
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I-C-6

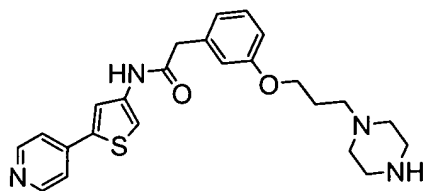


I-C-7

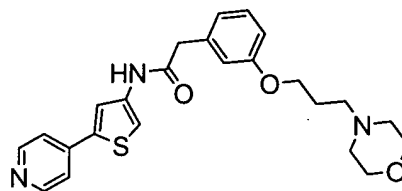


I-C-8

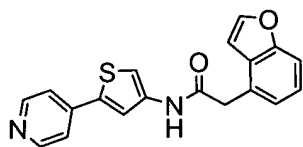
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



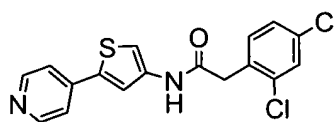
I-C-9



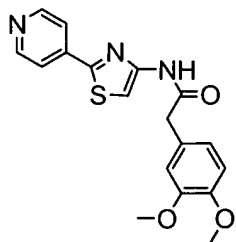
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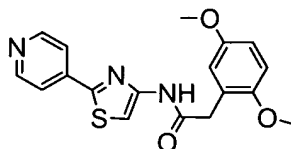
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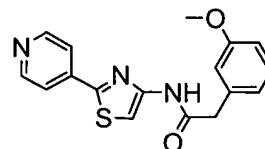
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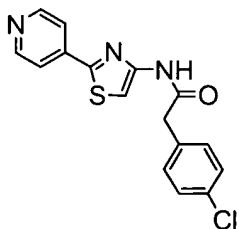
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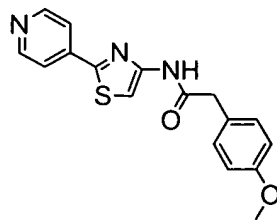
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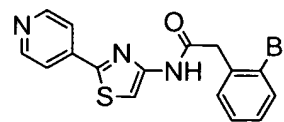
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I-C-16

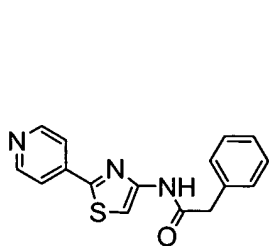


I-C-17

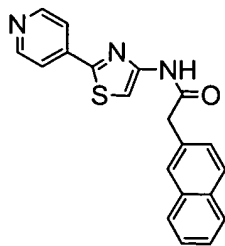


I-C-18

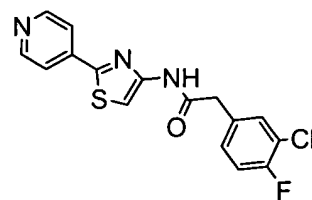
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



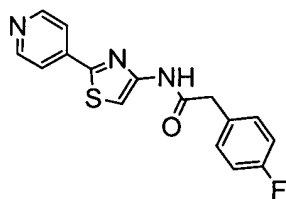
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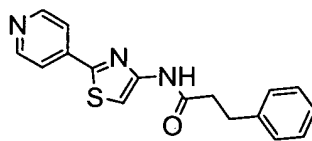
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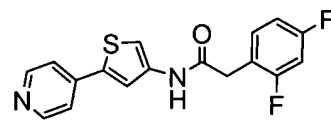
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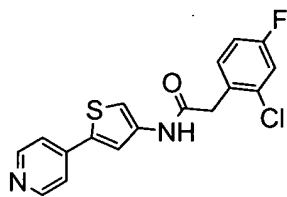
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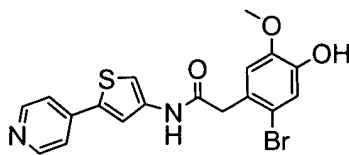
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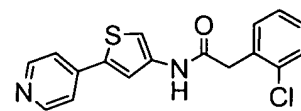
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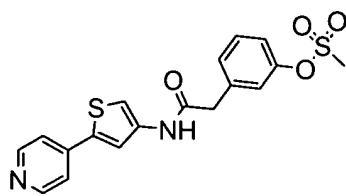
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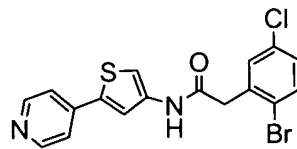
I-C-26



I-C-27

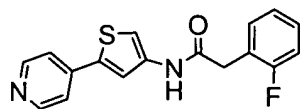


I-C-28

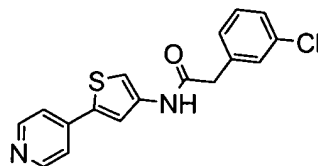


I-C-30

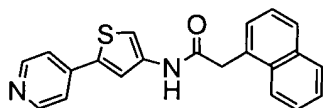
Applicants: Jingrong Cao et al.
Application No.: 10/696,862



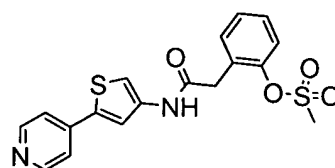
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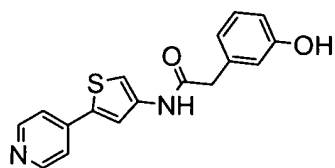
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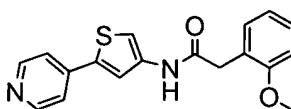
I-C-34



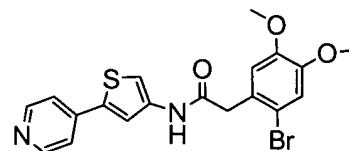
I-C-36



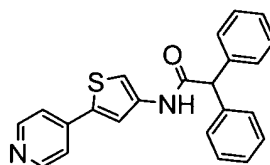
I-C-37



I-C-38



I-C-39



or I-C-41.

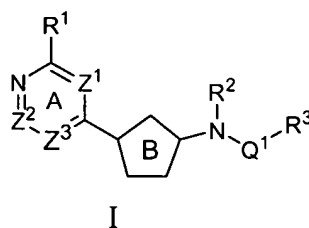
46. (Original) A composition comprising an effective amount of compound of claim 1, and a pharmaceutically acceptable carrier, adjuvant, or vehicle.

47-53. (Canceled)

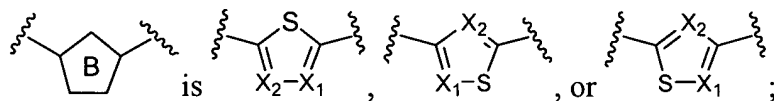
54. (Previously presented) A method of treating or lessening the severity of a disease or disorder selected from Alzheimer's disease, an allergy, asthma, or diabetes in a patient,

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

said method comprising administering to said patient a compound or a composition comprising a compound having the formula:



or a pharmaceutically acceptable salt thereof, wherein:



R^1 is halogen, CN, NO_2 , or V_mR ;

Z^1 and Z^3 are each independently CR^Z , and Z^2 is CR^1 ;

each occurrence of R^Z is independently halogen, CN, NO_2 , or $\text{U}_n\text{R}'$;

R^2 is $\text{U}_n\text{R}'$;

X^1 and X^2 are each independently CR^4 or N;

each occurrence of R^4 is independently halogen, CN, NO_2 , or V_mR ;

each occurrence of U or V is independently an optionally substituted C_{1-6} alkylidene chain, wherein up to two methylene units of the chain are optionally and independently replaced by $-\text{NR}-$, $-\text{S}-$, $-\text{O}-$, $-\text{CS}-$, $-\text{CO}_2-$, $-\text{OCO}-$, $-\text{CO}-$, $-\text{COCO}-$, $-\text{CONR}-$, $-\text{NRCO}-$, $-\text{NRCO}_2-$, $-\text{SO}_2\text{NR}-$, $-\text{NRSO}_2-$, $-\text{CONRNR}-$, $-\text{NRCONR}-$, $-\text{OCONR}-$, $-\text{NRNR}-$, $-\text{NRSO}_2\text{NR}-$, $-\text{SO}-$, or $-\text{SO}_2-$;

m and n are each independently 0 or 1;

each occurrence of R is independently hydrogen or an optionally substituted C_{1-6} aliphatic group; and each occurrence of R' is independently hydrogen or an optionally substituted C_{1-6} aliphatic group, a 3-8-membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully

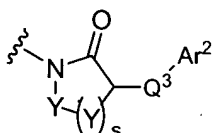
Applicants: Jingrong Cao et al.
Application No.: 10/696,862

unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; or R and R', two occurrences of R, or two occurrences of R', are taken together with the atom(s) to which they are bound to form an optionally substituted 3-12 membered saturated, partially unsaturated, or fully unsaturated monocyclic or bicyclic ring having 0-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

Q¹ is -CO-, -SO₂-, or -SO₂NR-;

R³ is Q²-Ar¹,

or R² and Q¹-R³, taken together with the nitrogen atom, form the cyclic group:



, where s is 1 or 2, each occurrence of Y is independently, as valency and stability permit, -CO-, -CS-, -SO₂-, -O-, -S-, -NR⁵-, or -C(R⁵)₂-, and R⁵ is U_nR';

Q² and Q³ are each independently a bond or a C₁₋₆ alkylidene chain, wherein up to two methylene units of the chain are each optionally and independently replaced by -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR', -NR'CO-, -NR'CO₂-, -SO₂NR', -NR'SO₂-, -CONR'NR', -NR'CONR', -OCONR', -NR'NR', -NR'SO₂NR', -SO-, or -SO₂-; and wherein any carbon atom in the one or more methylene units is optionally substituted with one or two occurrences of R⁶, wherein each occurrence of R⁶ is independently halogen, CN, NO₂, or U_nR', or two occurrences of R⁶, or R' and R⁶, taken together with the atoms to which they are bound, form an optionally substituted 3-6-membered cycloalkyl, heterocyclyl, aryl or heteroaryl ring; [[and]]

Ar¹ is a 5-8 membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from oxygen or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from oxygen or sulfur; wherein Ar¹ is optionally substituted with 0-5 independent occurrences of TR⁷; wherein T is a

Applicants: Jingrong Cao et al.
Application No.: 10/696,862

bond or is a C₁-C₆ alkylidene chain wherein up to two methylene units of T are optionally and independently replaced by -NR-, -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR-, -NRCO-, -NRCO₂-, -SO₂NR-, -NRSO₂-, -CONRNR-, -NRCONR-, -OCONR-, -NRNR-, -NRSO₂NR-, -SO-, or -SO₂-;

Ar² is a 5-8 membered saturated, partially unsaturated, or fully unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-12 membered saturated, partially unsaturated, or fully unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein Ar² is optionally substituted with 0-5 independent occurrences of TR⁷; wherein T is a bond or is a C₁-C₆ alkylidene chain wherein up to two methylene units of T are optionally and independently replaced by -NR-, -S-, -O-, -CS-, -CO₂-, -OCO-, -CO-, -COCO-, -CONR-, -NRCO-, -NRCO₂-, -SO₂NR-, -NRSO₂-, -CONRNR-, -NRCONR-, -OCONR-, -NRNR-, -NRSO₂NR-, -SO-, or -SO₂-; and each occurrence of R⁷ is independently R', halogen, NO₂, or CN.

55. (Previously presented) The method of claim 54, wherein said compound or composition is used to treat or lessen the severity of an allergy or asthma.

56. (Previously presented) The method of claim 54, wherein said compound or composition is used to treat or lessen the severity of diabetes.